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ABSTRACT

The objectives of the Systems Program Approaching Non-unemployment (SPAN) project, during the period covered by this report (1970-73), were to develop a comprehensive and continuing program (K-14) of occupational guidance information and techniques to ensure that the maximum number of young people entered vocational programs, to bridge the gap from school to work, to increase the relevance of educational programs to the world of work, to develop within the students more positive attitudes towards themselves, their education, their occupational goals and the world of work. At the elementary level, teachers developed films, learning packets, games, and other career-oriented materials which will continue to be used throughout the school district. At the junior high school level, the emphasis was on exploration of the fifteen career clusters, while at the high school level, the greatest effort was expended on career focus and placement. It was felt that the project successfully realized the objectives set out, and it will be continued and expanded throughout the Memphis school system. Of the ten appendixes the principal one is a 138-page comprehensive evaluation of the project. (SA)

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FINAL REPORT

PROJECT NO. V061115B
CONTRACT NO. OEG-0-70-5181 (361)

SPAN: An Accelerated Project for a Systems Program Approaching Non-unemployment of Vocational Students

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

James E. Hugueley
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The Project reported herein was performed pursuant to a grant with the Bureau of Adult, Vocational, and Technical Education, Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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SUMMARY OF THE REPORT

A. Period covered by the Report:

August 31, 1970 to August 31, 1973

B. General goals and objectives of the Project:

The general objectives of the project are as follows:

1.) Develop a comprehensive and continuing program of occupational guidance information and techniques which will, from K to 14th grade, insure the maximum number of young people entering vocational programs and then bridge the gap from school to earning a living.

2.) Develop a series of "hands-on" and soft educational units which will insure maximum relevance of education for the world of work.

3.) Develop within the student a desire to stay in school and obtain a general education, and skills for entering into employment.

4.) Develop within the student the ability to appraise his occupational goals in a manner equal to his abilities, desires, and the forecasted needs of industry.

5.) Develop an overall program of positive relationships with community, parents, consultants, and volunteer workers which will give students an enriched outlook on the "world of work."

6.) Develop all programs so the following characteristics prevail:

    a. Student develops self-understanding and self-awareness.

    b. Student recognizes and makes fuller use of his capabilities.

    c. Students develop positive adjustment to school, community and home environments

d. Student development of self-confidence and self-esteem.

e. Student develops the ability to make wise decisions.

7.) Develop a series of personal inventories which when given at grades 6, 9, and 12 will indicate realistic soundness of vocational choices.

8.) Develop a complete follow-up study which will test the relevance of the total project.

C. Procedures followed:

General Design

The general design of the project was appropriate in achieving stated objectives because it motivated students early in their school years to be aware of the various rewarding occupational careers. It has shown students a wide range of offerings and opportunities here in Memphis and across the nation. In addition it is felt that the project gave students some idea of the job satisfaction, working conditions and income potential of many varied careers.

Specifically, the project at the elementary level provided "laboratory" experiences in the occupational skills at the earliest grades which research indicated could be accomplished. At the senior high level the project had an effective placement component. A Job Guidance and Placement Center, two sections of General Co-op Training and a computer systems retrieval for career and follow-up information.

Phase I and II The three elements of the project have been operated in a series of phases. Phase one (1) which became operational at once was the Job Guidance and Placement Center which included the co-op work experience program. Phase two (2) Elementary Program was in full operation immediately as the Curriculum Specialist working with WKNO staff (ITV) began to research and develop 16mm fifteen minute SOF films. Some of the designs in the offerings were organized as follows:

Kindergarten: The child learns about the work activities of his mother, his father, and other members of his household.

Grade 1: The child learns about work in his immediate environment, his home, school, church, and neighborhood.

Grade 2: The child learns about community helpers who protect and serve him as well as about familiar stores and businesses in the community.

Grade 3: The child studies the expanding community. Emphasis is placed on transportation communication, and other major industries.

Grade 4: The child learns about the world of work at the state level, including the main industries of the state.

Grade 5: The child's studies broaden to cover the industrial life of the nation and major industries of the state.

Grade 6: The child's program is expanded to include the entire Western Hemisphere. Life in Canada and South Central America is contrasted with life in the United States.

The developmental sequence of the series started with the 5th and 6th grade and continued until kindergarten was completed. As the educational inserts (study guides, lesson plans, etc.) were developed, they were correlated at once with the scheduled T. V. coverage.

WKNO T.V., the Memphis Educational Television Station, began televising the series in September 1971. The series continued for the entire two school years at monthly intervals. (See appendix A for a copy of the I.T.V. schedule for both 1971-1972 and 1972-1973 school years).

Phase III Six para-professionals were employed by the Project to work with the elementary teachers during the 1971-72 school year. The aides were coordinated by Mr. Turpin, the elementary curriculum specialist. They rotated through the fifth and sixth grade classrooms in our target area elementary schools at monthly intervals. The prime responsibility of the para-professionals was to assist the elementary teachers in the "hands-on" activities that accompanied each film in the series. They also assisted the teachers in working with the educational inserts that were furnished each teacher in a packet. Ample materials were duplicated for the student's use. The use of teacher aides was discontinued during the 1972-73 school year and two professional teachers were employed to replace them.

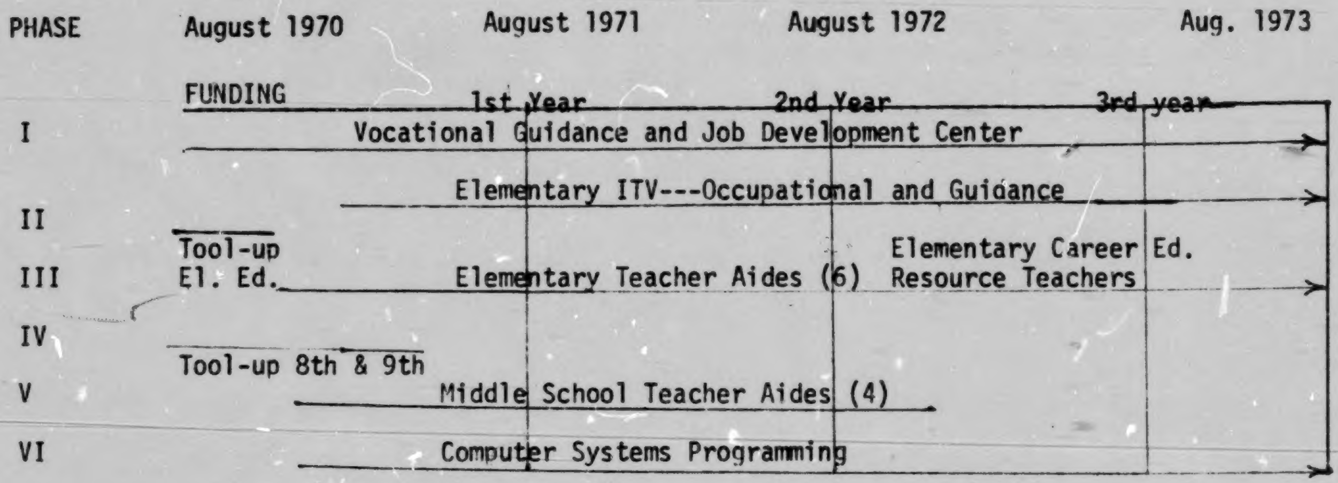
Phase IV This middle-school phase was in full operation during the 1971-72 school year. This phase was expanded to include also grade seven (7), as well as, grades eight (8) and nine (9). Software in the form of a student's workbook, curriculum guide, and similar "hand outs" were prepared during the 1971-72 school year. (See Appendix F for a bibliography of the software that has been developed and utilized in this phase.)

Phase V Two para-professionals were utilized in this middle school phase of the project in the 1971-72 school year. Their primary responsibility was to assist the teachers in home economics and industrial arts in making career exploration a workable element of these curriculums. The quality of the aides we obtained was low and we did not accomplish our goals to the extent we desired. We did not continue to employ them during the 1972-73 school year.

Phase VI The computer assisted career information aspect of the project was developed during the 1971-72 school year and was placed in full operation in September 1972 and expanded to all junior and senior high schools during the 1972-73 school year.

Illustration I

Implementation of Project Phases I through VI
August 31, 1970 to August 31, 1973

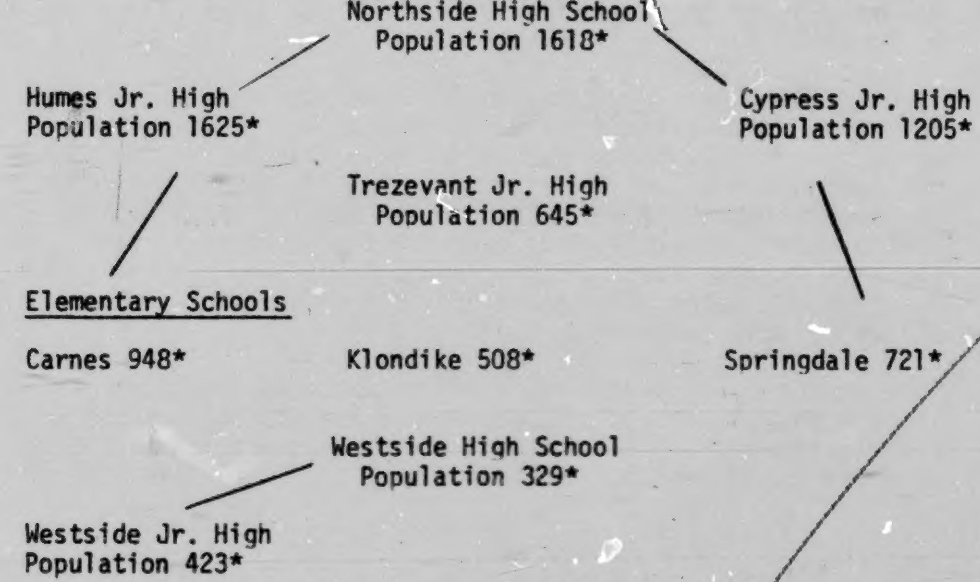


Schools and Location 1972-73 School Year

The project target area was amended during the 1971-72 school year to include Westside High, Westside Junior High and Westside Elementary.

The schools which encompassed the target area of the project in August 1973, were:

Illustration II



Northside High School
Population 1618*

Humes Jr. High
Population 1625*

Cypress Jr. High
Population 1205*

Trezevant Jr. High
Population 645*

Elementary Schools

Carnes 948*

Klondike 508*

Springdale 721*

Westside High School
Population 329*

Westside Jr. High
Population 423*

*All of the above figures are end of the year totals for June, 1973.

Participants

All officially enrolled students from those schools listed in schools and location above were considered as the functioning group in the project. It must be understood that I.T.V. materials developed in this target area were made available to all elementary students, school system wide. The target group contains 8,022 students which represents 8% of the total student population. It is estimated that all Memphis 4th, 5th, and 6th graders will take part in the I.T.V. series. This is approximately 31,568 students The "hands-on" and follow-up were directed to K-6 students in three target area schools.

D. Results; Accomplishments

All components of the project progressed well in line with the goals and objectives. The elementary phase of the project produced and field-tested ten films and a complete set of educational inserts and "hands-on" activities. The middle school phase of the project was implemented and field tested in all home economics/industrial arts classes and other varied disciplines in the target area schools. Two classes of general co-op training were incorporated as a part of the middle-school phase. This served to reach the students who were sixteen years of age and in junior high.

The high school phase of the project consisted of concentrated efforts of job development and placement. Two general cooperative training classes met daily and have been successful in placing one hundred percent of the students enrolled. Excellent rapport was developed with other on-going placement and training programs in the Memphis area. Various quick-shot programs for general target area students were conducted and concentrated placement efforts resulted in a range between 84% and 100% of graduating students placed during the past two years.

Many students were counseled regarding the area vocational schools, state technical schools and other post-high educational and apprenticeship programs. (See Appendix B for placement and follow-up of graduates of Westside and Northside High for the past two years.)

E. Evaluation:

The final comprehensive evaluation for the three years of the project can be found in Appendix J

F. Conclusions and Recommendations:

The project has met its stated objectives and has progressed on schedule, full implementation of all phases is a functioning reality. It has and is serving identified needs of our target population.

Body of the Report

A. Problem

Enrollment and Target Area. The Memphis City Schools in December 1969, at the time of the submission of our proposal had an enrollment of 134,049 students: elementary [illegible], middle school [illegible] and 25,302 senior high school. In May 1969, [illegible] students graduated from our high schools. Latest follow-up data of graduates indicates that 34 percent are attending college. It is anticipated that less than 20 percent will complete college. For all practical purposes [illegible] were available for employment. Of this number, 1,363 were students who had been trained in existing vocational programs. Local follow-up studies of all vocational graduates indicates a [illegible] for which [illegible] placement of sixty-five (65) percent, while fourteen (14) percent entered the armed services or [illegible] high school education. The remaining [illegible] entered or attempted to enter the labor force with no occupational training. It is estimated that thirty-five (35) percent of this group are from the minority race and were not prepared to enter the labor force. Paradoxically, this same group contains our greatest percentage of socio-economic, academic and culturally handicapped. They represent fifty-three (53) percent of the total school population. This group also contributed the greatest number of the unemployed out of school youth and is the target area for a program which will aid students in finding a bridge between school and earning a living. Within the target area, poverty plays an important role; thirty-eight (38) percent of the school enrollees come from families with incomes of $3,000 or less.

The 1970-71 school year showed an increase in our enrollment. Total enrollment was [illegible], elementary [illegible], middle school 37,734, and 28,818 senior high school. In May, 1971, [illegible] students graduated from our high schools.

The 1971-72 school year showed an overall decrease in our enrollment. Total enrollment was [illegible], elementary [illegible], middle school 37,104 and 29,244 senior high school. In May, 8,436 students graduated from our high schools.

The 1972-73 school year showed another decrease in our enrollment. Total enrollment was [illegible], elementary [illegible], middle school 32,266 and 29,173 senior high school. In May, 1973, 9,477 students graduated from our high schools.

The Dropout To further indicate the complexity of the problem, recent Memphis City School dropout data indicates that the dropout rate for the target area is 7.6% or twice as much as the local educational agency rate. Significant dropout patterns have been found as early as the 9th grade. By the time that the dropout leaves high school he is in the 11th grade and has reached the compulsory attendance age (17 years old.) He is not equipped with vocational skills. For example, during the 1968-69 school year, 585 students dropped out of target area schools. Of this number only 16 were vocational students who, in the opinion of the teacher, had developed saleable skills for employment in occupations for which trained.

To aid in combating the dropout problem the Memphis City Schools has established the Occupational Emphasis Program involving 180 potential dropout students. In this experimental setting these students are learning occupational skills, obtaining high school credits toward graduation and employment. Of significance is the eighty-five (85) to ninety (90) percent average daily attendance for a group of students who previously attended school rarely. Unfortunately this program does not presently have the capacity to meet the needs of all students who could be helped.

Other Local Solutions in Vocational Education

Other programs which currently operate cooperatively by the Division of Vocational Education and Special Education are the Perceptual Handicapped/Pre-vocational-Coop Training Program and Special Needs Elementary Skill Centers. The former is too new to ascertain its success in placing students in a full time occupational setting. However, the latter, located in target area elementary schools, has some success in holding overage elementary grade students in an occupational training and basic education environment until they can be placed into the middle school, full-time employment or in post-high school vocational programs at age 17.

In three target area high schools there are vocational improvement team teaching programs which vocationally relate remedial reading and arithmetic. This program though remedial in nature tends to keep students in trade and industrial subjects by reinforcing certain academic skills needed to understand better the dialogue of industry.

Additional Vocational Division studies indicate that not more than eighty-five (85) percent of the vocational training stations are filled in the target area schools, yet they have the capability of training 1,820 students in the subject areas of Trade and Industry, Distributive Education, Vocational Office Education, Occupational Home Economics, and Occupational Health Education. Additional guidance and counseling would tend to increase the enrollment by 364 students.

Required subjects in target area middle schools which tend to direct students into vocational programs are 8th grade industrial arts and home economics. In the target area there are 488 students taking 8th grade industrial arts and 406 taking home economics. Logic indicates that many boys and girls should follow-up with 9th grade comparable subjects if they are to take vocational programs in high school. Target area middle schools enrolled 1,548 in 9th grade industrial arts and home economics, less than 500 are boys. It is estimated that this figure could reach 1,800 students. However, there is evidence to indicate that all target area boys while not taking 8th grade industrial arts are taking this same subject in the 9th grade.

From the information presented it appears that potential non-college bound students are not being programmed into vocational subjects when "transitioning" into target area high schools.

Placement Need

Placement records indicated that all vocational graduates are not finding work in jobs for which they are trained. As more and more young adults graduate from high school the placement problem increases. In Memphis it has been detected that there exists a mismatch and nonmatching of students from high school vocational programs with local work stations or additional skill training at vocational and technical post high school programs. Current literature indicates that placement of target area type students can be improved provided the student who has acquired vocational skills is matched with the correct job work station and employer. The Education Commission of the States suggested, "The educational system should be responsible for carrying each student, of whatever age, through to the next step."

In a community such as Memphis serious problems in identifying job work stations can be narrowed to the following, (1) largeness of the industrial and business community, (2) great distance to travel to locate suitable work stations, (3) teachers accepting a responsibility unlike those of their academic colleagues, (4) lack of teacher release time for making contacts and (5) lack of funds for travel.

Additional problems arise for the college bound student who near graduation has changed his mind and now decides to enter the world of work. Literature indicates that it is the responsibility of the school to train and place this student. The task becomes complicated when without saleable skills the person goes door to door seeking employment. Various studies indicate that somewhere in this student's program he should be given an opportunity to quickly learn those skills needed for employment. In the Memphis City Schools the Distributive Education program has shown that it is possible to train young adults in a short time for employment. Pre-Christmas Sales Training Programs, conducted on a voluntary basis after school hours, has prepared hundreds who have been successfully employed for peak season sales work.

Parent's Role in Vocational Selection

Literature indicates that parents are not especially helpful in resolving personal, educational or vocational problems. Betz reports in "Perceptions of Non-college Bound Vocationally-Oriented High School Graduates," that poor parental assistance coupled with the students rather limited perception of the school, means that there is an absence of a 'significant other' to help these students make satisfactory vocational decisions." It is suggested that within the target area this is the case.

Of a serious nature is the poor concept parents have of a working environment which is more sophisticated than theirs. Various subjective observations made by the Memphis Vocational Staff indicates that parents of target area students hinder successful employment after training due to their lack of knowledge of what industry and business expect in respect to punctuality, working a full week or day, honesty and pride of workmanship. It is suggested that parents, teachers and guidance personnel need indepth training into ways of directing the above attitudes. Business and industry will give the target area student a chance to be employed if the student approaches work in a serious and productive manner.

Problem Assumptions

The evidence presented which focuses in on the problem suggests the following:

1. Memphis City Schools has a target area made up of predominantly the minority race which tends to find its students handicapped and disadvantaged. They are children with special needs.

2. The dropout problem in target area schools is real and serious.

3. A large percentage of Memphis high school graduates

are attempting to enter the world of work without vocational training. Vocational trainees are more successful in obtaining the first job. Target area schools are less successful in placing non-vocational students than non-target area schools.

4. Training space is available in vocational classes in target area schools.

5. The middle school's enrollment of students in subjects which normally direct students to vocational education indicates there is a large group of students who are:

   a. Uncommitted
   b. Uninspired
   c. Undecided

6. Industry and business have indicated that they will hire trained personnel regardless of ethnic origin, economic status, or handicaps.

7. Indications are that middle and senior high school educational selections would be more relevant to students needs for earning a living if in early years students developed a realistic concept of work and occupations.

8. Students taking vocational education are not dropout prone.

9. Memphis does not have an organized, student-centered occupational orientation program.

10. Parents tend to fail to encourage vocational students to seek and keep their first job.

11. Early school dropouts need a "quick shot" approach to learning basic occupational skills and job attitudes.

Problem Conclusion

The Memphis Board of Education has committed itself to the highest quality education possible. Rapid influx of students into the target area from surrounding communities and our operating budget which is lower than any school system in its population area makes the goal of quality education less than a reality. However, it should be noted that a number of innovative programs are in operation which are developing a high degree of expertise within associated personnel. It became the goal of this system to present a proposal for an exemplary project which will focus in preparing students for earning a living. The geographical target area is located in the most seriously disadvantaged and poverty areas of the school community.

The project was designed to give occupational orientation from K through 14. It was composed of exemplary elements leading to placement of vocational and nonvocational students.

The operational elements were designed to utilize many services from local innovative projects operated by the Department of Instruction, local employment service agencies, and various public and private post high school occupational training programs. The total project has been designed around other innovative and experimental programs discovered during research for the proposal.

B. Goals and Objectives of the Project

The complex nature of the total program dictates that the objectives be listed as general and specific. This approach tends to offer objectives for each element of the proposal that are concise and able to be proven.

A. General

1. Develop a comprehensive and continuing program of occupational guidance information and techniques which will, from K to 14th grade, insure the maximum number of young people entering vocational programs and then bridge the gap from school to earning a living.

2. Develop a series of "hands on" and soft educational units which will insure maximum relevance of education and skills for entering into employment.

3. Develop within the student a desire to stay in school and obtain a general education and skills for entering into employment.

4. Develop within the student the ability to appraise his occupational goals in a manner equal to his abilities, desires, and the forecasted needs of industry.

5. Develop an overall program of positive relationships with community, parents, consultants, and volunteer workers which will give students an enriched outlook on the world of work.

6. Develop all programs so the following characteristics prevail:

   a. Student develops self-understanding and self-awareness
   b. Student recognizes and makes fuller use of his capabilities
   c. Students develop positive adjustment to school, community and home environments
   d. Student development of self-confidence and self-esteem
   e. Student develops the ability to make wise decisions

7. Develop a series of personal inventories which when given at grades 6, 9, and 12 will indicate realistic soundness of vocational choices.

8. Develop a complete follow-up study which will test the relevance of the total project.

B. Specific

(K through 6)

1. Develop a series of ITV guidance films which are designed to give maximum emphasis on preparing a youngster to select realistic life goals leading towards specific educational preparation in the middle and high school.

2. Develop those "educational inserts" which will correlate the ITV film series with existing T. V. programs and curricular elements in the science and social studies areas.

3. Develop a program of "hands on" activities for grades K through 6 which will tend to improve manipulative skills at early years.

4. Develop a high degree of occupational sensitivity within the elementary teacher.

(7 through 9 Element)

1. Develop a relevant approach to industrial arts and home economics which will keep students in school.

2. Develop a series of educational inserts which are designed to give students experiences in making occupational choices and then enroll in appropriate courses in high school.

10 through 12 Element

1. Develop a vocational guidance and job placement center which will direct its attention to the placement and follow-up of vocational students.

   Additional objectives of this center are:

   a. Aid students in the selection of occupational fields of training in relation to their desires, acquired skills, innate abilities and the forecasted demands of industry and business.

   b. Give students personal guidance and counseling in order to aid them in daily problem solving activities.

   c. Follow-up on students as they progress through their training. Develop a workable relationship with each instructor in attempting to understand the potential and limits of each student.

   d. Provide pre-employment orientation in preparation to occupational applications and interviews.

   e. Develop job placement and post high school educational opportunities for senior and graduating Voc-Ed students within the target area comprehensive high school.

   f. To develop an accurate follow-up program on all students. The maintenance of adequate records to insure rapid retrieval of information will be a significant goal of this objective.

   g. To develop a program of orientation for feeder junior high schools servicing each comprehensive high school.

2. Develop a co-op program designed to give work experience to 12th grade vocational students, and those entering into employment but with no marketable skills.

3. Develop a summer or after school hour basic skill program for non-vocational and non-college bound students which will equip them with saleable skills for entry level employment.

C. Description of general project design and the procedures followed:

Illustration III

EVENTS		ACTIVITY	
1.	Funding Project		
2.	Project Director on hand	2,3	employ personnel
3.	Curriculum Specialist on hand		
4.	Office facilities ready	4a	order telephone service for East Branch and Northside Headquarters
5.	Equipment and supplies on hand	5a	order supplies and office equipment for East Branch and Northside
		5b	select and order Guidance publications and books
		5c	order audio (tapes, records, reorder)
		5d	equipment and supplies received for East Branch and Northside Headquarters
6.	ITV element organized	6a	establish ITV advisory committee
		6b	select and order interest inventory
		6c	select schools in target area to be given inventory
		6d	advise principal, request his approval
		6e	parent conference interview
		6f	develop student survey-interview sheet

6g establish sample questions to be used in tape interviews

6h establish schedule of survey of interest for elementary schools

6i establish schedule of survey of interest for elementary schools

6j ITV Advisory Meeting/ Dutch Treat Luncheon

6k tabulate results of interview

6l tabulate results of parent interview

6m tabulate results of teacher interview

6n interview Tennessee Employment Security re: Occupations

6o contact Chamber of Commerce regarding project and potential industries

6p convert potential industry to potential occupations

6q match Tennessee Employment Security, student desires, Chamber information

6r select unlimited number of galaxies for films

6s develop sequence of shooting first fifteen films

6t obtain examples of tapes from other systems

6u review tapes and films

6v	select format for SPAN approach to ITV units
6w	theme song
6x	research types of music
6y	selection of tapes vs. 16mm films
6z	selection color vs. black and white
6aa	selection of length
6bb	develop scripts
6cc	develop "hands on" and educational inserts for 1st ITV unit
6dd	select characters and locations for 1st ITV unit
6ee	shooting of 1st ITV unit
6ff	in-service of teachers of ELMED element
6gg	educational inserts and 1st ITV unit ready for implementation
6hh	in-service of all elementary supervisors in the Memphis City Schools
6ii	pre-test of selected target area children
6jj	field test of 1st ITV unit implemented with "hands on" educational inserts and WKNO showing of film

7. ITV Occupational Ready to film	7a	locations, characters, script selected and ready for shooting
	7b	locations, characters, script selected and ready for 2nd ITV unit
	7c	develop "hands on" and educational inserts for 2nd ITV unit
	7d	shooting of 2nd ITV unit
	7e	field test in target area of 2nd ITV unit
	7f	locations, characters, scripts selected and ready for shooting of 3rd and 4th ITV unit
** Accomplishments 1971-1972 school year	**7g	locations, characters script selected and ready for shooting of 5th, 6th, 7th, 8th, 9th, and 10th units
	7h	"hands on" and educational inserts ready for all ITV series 1-10
	7i	scheduling complete for WKNO airing during 1971-1972 school year
	7j	supplies listed and ready for purchasing for all "hands on" activities and projects
	7k	six elementary teacher aides selected and employed
	7l	ITV series ready for full implementation in target area schools

7m full implementation of ITV series of films 1, 2, 3, 4, 5 with accompanying "hands-on" activities in target area 5th and 6th grade classrooms.

7n field trips and resource speakers initiated by target area teachers for 5th and 6th grade students to see the "world of work."

7o materials selected for K-4 approach to career exploration.

7p implementation for career exploration in grades K-4 in target area schools.

7q full implementation of ITV series of films 6,7, and 8 with accompanying "hands-on" activities in target area 5th and 6th grade students.

7r field trips and resource speakers from the three occupational clusters of ITV series conducted and programmed for 5th and 6th grade students.

7s elementary career education resource teachers on station in three elementary schools.

7t elementary instructional television series with accompanying teacher's guide available to all 4th and 5th and 6th grade teachers in the Memphis City Schools and surrounding school systems.

**7u-7w accomplished 1972-73 school year

7u implementation of teacher workshops at local schools and individual development by teachers of units in career education.

	7v	city-wide professional growth activities for all teachers K-12 grades.
	7w	implementation of career education activities in grades K-6 in model schools.

**7g through 7r accomplished from June 30, 1971, to August 31, 1972.

8. Middle School Element Organized and Staffed	8a	obtain home economics and industrial arts curriculum guides.
	8b	conference with teachers, counselors and supervisors.
	8c	order interest literature
	8d	review current interest literature.
	8e	request copies of interest literature currently used by counselors and vocational teachers in Memphis school system
	8f	list interest literature in junior high school library.
	8g	research curriculum library at Memphis State University for interest material.
	8h	start writing occupational orientation curriculum for middle school element.
	8i	secure copies of textbooks used in vocational courses.
	8j	periodical check with supervisor and director on progress.
	8k	occupational orientation curriculum written and completed for middle school elements.

8l in-service for home economics and industrial arts teachers and supervisors.

8m pre-test given to target area students before implementation of middle school elements.

8n implementation of middle school occupational orientation curriculum.

8o field test and implementation of occupational orientation curriculum in all home economics and industrial arts classrooms in target area.

8p post test given to target area students after implementation of middle school elements.

8q implementation of general co-op training classes in middle school element.

8r placement of general co-op training students.

** Accomplishments during 1971-1972 school year (8s-8gg)

*8s organized and wrote materials for a work text for use by students in the 7th grade language arts and social studies curriculum.

8t purchased teacher materials and packets for classroom use.

8u career orientation curriculum ready for complete implementation.

8v continued general co-op placements during summer.

8w contacted all parents and/or guardians of next years students.

	8x	efforts complete for enrollment in general co-op classes of all overaged students at our target area middle school.
	8y	two teacher aides selected and employed.
	8z	all components of Middle School phase (grades 7-9) ready for full implementation.
	8aa	implementation of all components of middle school phase (grades 7-9).
	8bb	field trips and resource speakers scheduled and conducted at target area schools.
	8cc	placement of junior high students progressing.
	8dd	teacher aides rotating through junior high classrooms.
	8ee	all components progressing on schedule of PERT 8aa, 8bb, 8cc, 8dd.
	8ff	implementation of microfiche aperture card approach to occupational information system or Project INFOE.
	8gg	summer workshop for junior high teachers and guidance counselors in target area.
**8hh, 8ii, 8jj, 8kk accomplished 1972-73 school year	8hh	career education resource teachers on station in junior high school.
	8ii	implementation of Career Education Activities in grades 7, 8, and 9 (field trips, resource speakers, INFOE, etc.)

	8jj	general cooperative training class for over-aged junior high students organized and in operation.
	8kk	implementation of computerized assisted career information at grades 7, 8, and 9.
9. High School Element Organized and Staffed	9a	staff on hand.
	9b	initial contact with schools through guidance departments and principals.
	9c	establish student criteria and select students.
	9d	compile course material and curriculum guide for co-op phase.
	9e	curriculum guide and course material complete for this element.
	9f	high school element implemented with co-op classes and guidance and placment center.
	9g	high school element implemented with co-op classes and guidance and placement center.
	9h	guidance and job placement of general co-op training students.
	9i	guidance and job placement of vocational seniors at target area high school.
**Accomplishments during 1971-72	** 9j	implementation of numerous "quick shot" programs for selected general students.
	9k	students selected for general co-op class.
	9l	"quick shot" programs for all vocational students and

		selected general students planned and ready for implementation.
	9m	career conference schedules for each senior planned and student's files complete with occupational tests, etc.
	9n	all components of the high school phase are complete and ready for implementation.
	9o	implementation of senior co-op classes, individual student conferences and vocational quick shots.
	9p	placement progressing for general co-op and vocational senior students.
	9q	field trips and resource speakers utilized in all aspects of this element.
	9r	all components progressing on schedule or PERT 9n, 9o, 9p.
	9s	planning before implementation of computerized occupational information system.
	9t	implementation of microfiche aperture card approach to occupational information or Project INFOE.
**9j through 9u accomplished from June 30, 1971 to August 31, 1972	9u	full-time placement and follow-up of all exiting or graduating seniors.
***	9v	summer workshop for senior high teachers and guidance counselors in target area.
	9w	job placement coordinators

on station in target area high schools.

9x implementation of general cooperative classes in high schools and placement of enrollees.

9y full implementation of computerized assisted career information system (CACI). Implemented in all thirty (30) senior highs in the Memphis City Schools.

9z Implementation of mini courses (quick shot) for senior students. Placement activities for graduating seniors continuing

***9v,9w,9x, 9y, 9z, accomplished during 1972-73 school year

D. Results and Accomplishments of the Project

1. Explanation of PERT - SPAN Project (1970-71 year)

The PERT events listed in the left margin are taken from the PERT network found on pages 15 through 17.

We concentrated on both the general and specific objectives and goals of the project during this year. We divided the project into four elements for discussion purposes: K through 6 element, 7 through 9 element, 10 through 12 element, and Administration.

PERT 6a - 6jj The K through 6 element was staffed with an elementary curriculum writer, Mrs. Mary Payne, on August 6, 1970. She researched the correct approach to use in the ITV series. She visited the Atlanta, Georgia School System and Mrs. Helen Cook to view the approach that had veen used there. I.T.V. occupational films and tapes were ordered from other school systems across the country. She viewed these with members of the WKNO-TV staff. Two reactions of elementary students. She determined very quickly that various approaches used in these films would not suffice for our purposes. The films did not hold the attention of the students.

The final challenge was evident - we needed a theme that would hold the student's attention. We began a diligent effort to discover what this might be. We discounted some ideas that were presented in the films from other systems. In an effort to discover the approach which we should use, we administered the Science Research Associates Interest Inventory, "What I Like to DO." The purpose in administering this particular test was to determine the interests were then invorporated into the ITV films and educational inserts. The tabulation of the scores of these fifth and sixth graders were as follows:

RAW SCORE MEAN

	5th grade girls	5th grade boys
art	65 percentile	75 percentile
music	65 percentile	80 percentile
social studies	70 percentile	60 percentile
quiet play	70 percentile	70 percentile
active play	50 percentile	50 percentile
manual arts	68 percentile	60 percentile
home arts	65 percentile	78 percentile
science	65 percentile	32 percentile
	6th grade girls	**6th grade boys**
art	61 percentile	70 percentile
music	52 percentile	78 percentile

social studies	70 percentile	52 percentile
active play	52 percentile	65 percentile
quiet play	75 percentile	60 percentile
manual arts	74 percentile	65 percentile
home arts	60 percentile	82 percentile
science	65 percentile	48 percentile

We concluded that music and artistic backgrounds for the films were necessary. The need for developing and/or utilizing scrap books was evident. The high level of interest in the manual arts indicated that "hands on" activities involving building things and working with tools were advisable. A close association with home activities was indicated by the high scores in home arts. These scores lead us to place emphasis on life styles in the films. The relative lower scores in the social studies and science areas may be based on the fact that many of the statements in these two areas began with the words: "Read a ......" or "Listen to a lecture about ......". These results lead us to lean more heavily on the physical involvement of the child in the activities and to avoid reading and/or talking to any great extent.

An ITV overall advisory committee was formed to help with planning for the film series. Representatives from education, industry, parents, and WKNO T.V. volunteered to serve on the committee. The first ITV advisory committee meeting was held in September, 1970. At this meeting, the committee was given a folder containing the names and titles of the committee members, a list of the experimental schools and the names of the principals, counselors, teachers and schedules of activities for starting phase I of the project, copies of the project abstract, copies of the questionnaire to be given the students, and copies of the 1st PERT activities.

The staff gave a brief progress report after which the committee members were told how their expertise would be utilized in the project. The members expressed an eagerness to serve; each felt that the project was meeting a great need in the Memphis area.

It became evident after a short period of time that the time schedule of the ITV series was overly ambitious. Mrs. Grace Williams was hired on August 17, 1970, to be curriculum writer for the junior high level. In addition to her regular duties she assisted Mrs. Payne in the preliminary planning of the elementary phase to get it operational.

Various home visits were initiated by the two ladies. Approximately twenty parents in the communities of the experimental schools were visited. The parents were informed of the general objectives of the project and the activities in which the students would be participating. They were very receptive and expressed pleasure at having this type of program in their schools. They offered to assist in any way they could with the project; most met with the SPAN staff and reviewed the materials developed at intervals during the year. It was felt that the home visits gave the SPAN staff some insight into the community's problems and at the same time gave the parents the feeling that the Board of Education and the Vocational Education Division were concerned about their children.

Another questionnaire was administered to the same experitmental group as the SRA "What I Like to Do." We needed additional information regarding student awareness at these grade levels. Generally speaking, the information obtained was what we had expected (that is, it was similar in part to what the Atlanta project found.) Few of the children knew occupational titles other than old stand bys like teacher, doctor, nurse, policeman, mailman, and fireman. A number of the boys wanted to be football players, and some of the girls wanted to be stewardesses or movie stars. Although they were not always able to supply names for the occupations, the boys described the work done by sixty-one different workers. The answers were quite revealing: one boy said he wanted to be a "man"; another wanted to be an "important man" when he grew up; another simply wanted to be "something." The girls were not quite as diversified; they only described 38 different workers. The answers ranged from "teacher" to a "harpsichord player."

On December 16, 1970, Mrs. Payne and Mrs. Williams met with Mr. George Clark, Director of Elementary Instruction, and a delegation of 5th and 6th grade teachers from the target area for the purpose of gaining insight and direction for the "hands on" materials for the elementary portion of Project SPAN. Also, in attendance were Mr. W. A. McGinnis, Director of the Vocational Division, Mr. James Marsh, Assistant Director of the Vocational Division, Mr. John Ralston, Supervisor of Industrial Arts, Mrs. Odessa Myers, Elementary Supervisor, and Mr. Gene Holland, Principal of Gordon Elementary.

Each person was given a packet containing a sample or description of the various "hands on" materials and a check list for evaluating the material.

The group discussed the advantages and disadvantages of hardware versus software for use in the classroom; no conclusion was reached at this meeting. The members were asked to return an enclosed checklist and the approach to be used would be decided on the basis of this checklist.

The budget that was approved by the U.S. Office of Education permitted us to produce only ten (10) ITV films. WKNO-TV usually charges approximately $2,000 for each film comparable to the ones they are producing for our project. Various negotiations were conducted and a figure of $820.00 per film was agreed upon. The deadlines were considered to be too optomistic, however.

The problem of which particular career cluster would be presented in the films was next approached. Various projections of labor needs in our area over the next decade or two were explored. Various groups came to the surface at this point and desired that their occupations be featured. Various building trades associations and unions made offers to help us to implement a film on their area, but these proved to be "talk" and little action. These were construed as attempts to gain some publicity at our expense.

In consultation with our advisory committees and the vocational division, we arrived at a series of clusters to be presented in the films.

Some changes in titles were made as work on these continued, but the clusters of occupations remained as originally decided.

PERT 7g - 7f

The first ITV film entitled "Who Builds Our Houses?" was field-tested on March 1 and 2, 1971, and the "hands on" activities were field-tested in twelve (12) 5th and 6th grade classrooms in the target area on March 4 and 5, 1971. Three Career Opportunities Program (COP) teacher aides assisted Mr. Hugueley, Mrs. Payne and Mrs. Williams in the implementation of the "hands on" activities. All 5th and 6th grade classrooms in both the city and county school systems, one-thousand classrooms, received these materials. Response was favorable and we decided that our approach was correct. We had a film and a complete set of inserts to use as a pattern for future films in the series.

The second film was field-tested on the Health Occupations, "Who Keeps Us Healthy?" on May 12 and 13, 1971.

The educational inserts and "hands on" activities of the ten films were completed and implemented during the school year. A film was shown each month and career education resource teacher aides worked with all of the 5th and 6th grade classrooms in our target area on a rotating basis. This permited a total of approximately 4,000 students to obtain "hands on" activities.

The cost of providing instructional materials was a heavy burden. Financially, we were unable to do so with our budget. To solve this problem we solicited donations from the business community. Businesses demonstrated a willingness to donate materials and equipment for our use. The field tests conducted after the showing of the first two films would have been impossible except for donations from businesses. They donated bricks, trowels, paint, brushes, faucets, sand paper and a multitude of other materials. This saved the project much money that was needed elsewhere.

We reached our goal August 20, 1971, to have all educational inserts and "hands on" activities printed and packaged for distribution. We had "hands on" materials ready for all ten films and ready for distribution at selected intervals during next school year. The expanded target area would permit us to provide services to fifteen (15) elementary schools.

PERT 8a - 8n

The 7 through 9 element was staffed with a curriculum writer, Mrs. Grace Williams, on August 17, 1970. She researched this phase and discovered materials that had been previously developed. ERIC helped with this research effort. She brought all career materials together and obtained sources for free and inexpensive teaching aids.

The K through 6 and 7 through 9 elements were housed in a room at the Adult Education Center-East Branch. The office was staffed with a secretary, Mrs. Barbara DeLee, who worked with these two elements of the project.

It was soon evident that the expertise of Mrs. Williams was needed in the elementary phase as well. The task of getting the phase off the ground required a tremendous amount of effort. Mrs. Williams, therefore, alloted her time between both of these elements of the project.

As the elementary phase gained momentum, Mrs. Williams was able to allot time to the 7-9 element. She researched the libraries of each of our target area middle schools to see what occupational materials were available for student use. She obtained home economics and industrial arts curriculum guides and arranged conferences with teachers, counselors and supervisors of these two areas. After proper research of all available sources, she constructed an occupational orientation curriculum guide. It was written in such a way as to be integrated into the curriculums of industrial arts and home economics.

This guide was completed in January, 1971, and field-tested in each home economics and industrial arts classroom in the target area schools. A pre and post test was given to ascertain its effectiveness in meeting stated objectives.

The on-going evaluation process required much time. Pre and post tests had to be given and checked by the elementary and middle school curriculum writers. The Gordon Occupational Check List was recommended by our evaluators as the proper test for the 7 through 9 element. The 7 through 9 element was ready for full implementation in September, 1971. Two full-time teacher aides rotated between three schools and helped the teachers to implement the guide and various "hands on" activities.

The social studies teachers at the seventh grade level were interested in integrating occupational orientation in their curriculum. An additional guide was prepared.

Another part of the 7 through 9 element is the General Co-Op Training Class. Two classes of thirty-two (32) students were offered for students who were 16 years of age. These classes met daily and began during the second semester, 1970-71 school year. The students were released from school in the afternoon to pursue a job in industry. Placement efforts were successful. (See attached chart in Appendix C)

We expanded these classes to two at each of our target area junior high schools during next year. This permitted us to reach all over-aged students in these schools

Mr. John Coulthurst, Mr. Jother Locke, Miss Thelma Nelms, and Miss Minetta Hill are our General Co-op Training Teacher-Coordinators at this level. They taught a class of General Co-op Training at our target area high schools and junior high schools: Westside High, Northside High, Humes Jr., and Cypress Junior.

PERT 9a - 9i The 10 through 12 element became operational during second semester, January, 1971. It was staffed by a Job Development Person, Mr. Marshall Marcus, and part-time duties of Mr. John Coulthurst and Mrs. Katherine King. Mr. Marcus joined our staff on October 16, 1970 and began to research this phase. A need that quickly became evident was a curriculum guide that could be used by our teachers at this level. Mr. James Hugueley and Mr. Marcus began to construct a guide for this purpose.

Mr. Marcus originally was hired for a teacher-coordinator position, but his expertise was required in the job development position. He, however, helped set up the classes in the junior high schools and high schools in our target area. He contacted all guidance counselors at the junior high schools, and Northside High School to plan the program for each school.

Students for the junior high co-op phase had to be interviewed and proper schedules changed initiated. Final selections were effected and arrangements were made for the classes to begin second semester.

Materials were also researched for our use in numerous "quick shot" programs that were planned. An excellent guide was discovered at the Memphis Community Learning Lab, a federally funded project. The guide was utilized in these classes.

A set of visuals and sample applications were ordered for our use also at this level. The project cooperated with many other agencies as we stated in our objectives and goals.

The approach to be used in the 10 through 12 element was modified and we feel improved for 1971-72 school year. All vocational students were exposed to a two (2) weeks unit stressing basic job skills and attitudes. A general co-op class met daily for students who desired training in a vocational area that was not offered at Northside. They obtained co-op work experience in the afternoon. All second semester vocational seniors were given a chance to obtain work experience as ready during the second semester of the senior year.

The Administrative Structure (August 1970-71

The administrative structure of the total program is headed by the Director of Vocational Education, Deparment of Instruction. To assure continuity organization and direction the Vocational Education Director is assisted by the overall project director.

Assigned curriculum specialists work directly under the project director's supervision. Teacher aides were assigned to the elementary and middle school curriculum specialist and rotated through various schools as the plan dictated.

The Vocational Guidance and Job Placement Center is administered by the project director. Job Placement Coordinators assigned to this element are directed by the project director.

Headquarters for this project is Northside High School as it is centrally located to the target area population.

The SPAN Project Director, James E. Hugueley, was employed on September 1, 1970.

James E. Hugueley	Project Director-employed September 1, 1970
Mary Payne	Elementary Curriculum Specialist employed August 1970
Grace Williams	Middle School Curriculum Specialist employed August 17, 1970
Barbara DeLee	Secretary, East Branch, employed August 24, 1970
Doris Flowers	Secretary, Northside Headquarters
Marshall Marcus	Job Developer, Northside Headquarters employed October 16, 1970
John Coulthurst	Job Placement Coordinator, Westside High-employed Dec. 14, 1970

Results and Accomplishments of the Project:

2. Explanation of Pert - SPAN (1971-72 year)
   The PERT events listed in the left margin are taken for the PERT network found on pages 18 through 21.

   We have continued our concentration on both the general and specific objectives and goals of the project during our second year. We divided the project into four phases for discussion purposes: Kindergarten through grade six (6) phase, grades seven (7) through nine (9) phase, grades ten (10) through twelve (12) phase and project administration.

PERT
7g-7r

The Kindergarten through Grade Six Phase was staffed with an elementary curriculum specialist, Mr. Jerry Turpin, and six para-professionals or teacher aides. Under Mr. Turpin's coordination the I.T.V. series of ten films and the teacher packets were completed. This series was broadcast over WKNO at monthly intervals and reviewed by our target area students at the fifth and sixth grade levels. (See Appendix A for an I.T.V. schedule of the series).

The six para-professionals rotated through the fifth and six grade classrooms in the fifteen elementary schools that comprise our target area. Three thousand and three hundred and forty-one (3,341) fifth and sixth grade students are located in the target area. The primary responsibility of the aides was to assist the teacher with the "hands-on" activities. They rotated through each classroom a total of nine times during the year. This presented a tremendous scheduling problem. There was a total of one hundred thirty classrooms in our target area. A secondary responsibility of the aides was to encourage the use of a SPAN bus for field trips and resource speakers in the awareness activities in ten (10) clusters at this grade level. (See D for a listing of field trips taken in target area.)

We were unable to accomplish as much as we wished at the K-4 level, as, the logistics, scope, and staffing of the program at grades five and six consumed the majority of our time and efforts. We selected two schools in our target area to implement activities at grades K through four. Various commercially-produced film strips and locally developed "hands-on" activities were organized and utilized to implement this aspect of the project.

PERT
8s-8gg

The Grade Seven through Nine Phase of the project was coordinated by Mrs. Grace Williams, Middle School Curriculum Specialist. Many and varied methods were used to involve the middle school students in career education activities. Two vocational interest instruments, the Kuder E Interest Inventory and the Gordon Occupational Checklist, were used in conjunction with a 7th grade student work-text and curriculum guide for grades 8 and 9 to help students develop an awareness of self and to relate their interests, abilities, and other characteristics to career choice.

Field trips, resource persons, career games, audio visuals and exhibits were used to disseminate career information to the students, faculties and communities.

We also implemented Project INFOE (Information Needed for Occupational Entry.) The vehicle for delivery of the information is a microfiche aperture card and a microfiche reader. The student selects the occupation of his choice and can research the occupation. The card on each occupation consists of four pages. A hard copy could also be obtained from the SPAN office. Microfiche readers were located in each of the junior and senior high schools in our target area. Project INFOE is an adaptation of View materials. (See Appendix E for a sample card.)

Junior high school teachers and counselors participated in two career education workshops held by Memphis State University in the winter of 1972 and the summer of 1972. In these workshops the teachers developed units designed to integrate career education into their subject matter areas.

The junior high general cooperative class was quite successful. (See Appendix C for placement results at our two junior high schools - Humes and Cypress.)

PERT
9j - 9u

The Grade Ten through Grade Twelve Phase of the project was staffed by three job placement coordinators. Mr. Marshall Marcus and Mr. Jother Locke concentrated their efforts at Northside High and Mr. John Coulthurst was located at Westside High. Mr. Locke taught a general cooperative education class at Northside and Mr. Coulthurst taught a similar class at Westside High. The classes met for one hour daily and the students were released for part-time work experience in the afternoon. A total of 52 students were enrolled at these schools and 100 percent of these students were placed in jobs. The "quick shot" programs were conducted in each vocational service area. Career conferences were held for each senior in cooperation with the guidance department.

INFOE, a career information program developed by the Research Coordinating Unit at the University of Tennessee at Knoxville, Tennessee, was introduced to the senior high counselors and students. INFOE provided students with current, localized information on specific jobs.

The computerized occupational information system was also researched. We implemented the system on a city-wide basis the first of September 1972. This system is designed to assist the student in career planning and gives him an insight on different occupational areas and the requirements of these areas. This system was made available to all students in grades 7 - 12. (See Appendix G for a sample computerized print-out.)

Approximately 300 jobs jobs descriptions were stored in the computer center at the Board of Education and are available upon student request.

The Administrative Structure (August 1971-1972)

The administrative structure of the total program is headed by the Director of Vocational Education, Department of Instruction. To assure continuity organization and direction the Vocational Education Director is assisted by the overall project director.

Assigned curriculum specialists work directly under the project director's supervision. Teacher aides were assigned to the elementary and middle school curriculum specialist and rotated through various schools as the plan dictated.

The Vocational Guidance and Job Placement Center is administrated by the project director. Job Placement Coordinators assigned to this element are directed by the project director.

Headquarters for this project is Northside High School as it is centrally located to the target area population.

The SPAN Project Director, James E. Hugueley, was employed on September 1, 1970.

James E. Hugueley	Project Director - employed September 1, 1970
Jerry Turpin	Elemnentary Curriculum Specialist employed June 1, 1971 - Klondike Elem.
Grace Williams	Middle School Curriculum Specialist employed August 17, 1970.
Barbara DeLee	Secretary, Northside Headquarters Office employed August 24, 1970
Carolyn Rosen	Clerk-typist, Northside Headquarters employed April 5, 1972, to replace Karen West
Marshall Marcus	Job Developer, Northside Headquarters employed October 16, 1970

* John Coulthurst	Job Developer, Westside High, employed December 14, 1970
* Thelma Nalms	Co-op Coordinator, Humes Junior High employed September 7, 1971
* Minetta Hill	Co-op Coordinator, Cypress Junior High employed October 15, 1971
* Melvin Earnest	Technical Apprentice, Northside Headquarters employed Sept. 10, 1971
* Earl Purdy	Technical Apprentice, Northside Headquarters employed September 9, 1971
* Gladys Steinberg	Technical Apprentice, Northside Headquarters employed September 3, 1971
* Edwin Bellue	Technical Apprentice, Northside Headquarters employed September 2, 1971
* Ricky Jackson	Technical Apprentice, Northside Headquarters employed September 7, 1971
* Charles Johnson	Technical Apprentice, Northside Headquarters employed September 13, 1971
* Earnest Smith	Technical Aide, Northside Headquarters employed September 28, 1971
* Theresa Mosby	Technical Aide, Northside Headquarters employed February 22, 1972

*These technical aides and apprentices were terminated by the project on May 30, 1972.

Lorraine Bell	Elementary Career Education Resource teacher, Carnes Elementary Employed July 5, 1972
Joyce Bousson	Elementary Career Education Resource Teacher, Springdale Elementary employed July 10, 1972

Results and Accomplishments of the project

3. Explanation of PERT - SPAN Project (1972-73 school year) The PERT events listed in the left margin are taken from the PERT network found on pages 15 through 17.

   We concentrated on both the general and specific objectives and goals of the project during this year. We divided the project into four elements for discussion purposes: K through 6 element, 7 through 9 element, 10 through 12 element, and Administration.

PERT 7u,7v, 7w The Kindergarten through Grade Six Phase was staffed with an elementary curriculum specialist, Mr. Jerry Turpin, and two elementary career education resource teachers, Mrs. Joyce Bousson and Mrs. Lorraine Bell. Three model schools were served which featured grades K-6. The SPAN elementary staff worked with teachers in grades K-3 in implementing and planning units to be integrated into the varied elementary subject disciplines. They assisted the teachers in grades 4-6 in implementing the I.T.V. (Instructional Television Series) and the varied activities contained in the three-hundred page teacher packet. A variety of techniques were utilized such as field trips, resource speakers, varied commercially produced visuals and materials and "hands-on" activities.

We feel that the staff was extremely successful in these implementation efforts.

PERT 8hh, 8ii, 8jj, 8kk The Grade Seven through Nine Phase of the project was staffed with Ms. Thelma Nelms, and Ms. Minetta Hill. These two staff members taught two general co-operative education classes for overaged junior high students. These students attended a one hour class daily and obtained on-the-job work experience in business and industry. (See Appendix C for placement data)

The staff members also worked with teachers in various disciplines to integrate career units and career exploration activities in their curriculums. Three SPAN locally developed curriculum guides were also utilized. These were as follows:

Career Development Worktext for use with seventh grade students

Occupational Orientation Guide for Industrial Arts and Home Economics (Grades 7-8)

General Guide and Career Education at the Junior High Level (Grades 7,8, and 9)

All teachers received copies and in-service on the use of these materials.

Project INFOE was also utilized and is discussed in earlier section of this report (See Appendix E for a sample card)

CACI, computerized assisted career information, was also used by the students in career exploration activities. (See Appendix G for a sample personalized print-out)

PERT 9v-9z The Grade Ten through Twelve Phase of the project was staffed with three job placement coordinators. Mr. John Coulthurst served Westside High and Mr. Marshall Marcus and Mr. Jother Locke served Northside High School in this capacity. Two classes of General Cooperative Education were conducted by Mr. Locke and Mr. Coulthurst. A total of 51 students enrolled for these classes which met one hour daily. These students obtained two school credits and on-the-job work experiences in business and industry. One hundred percent of these students were placed.

The staff set as its goal, 100% placement of all seniors. (See Appendix B for placement results). Career Counseling and varied quick-shot courses were conducted for seniors and other interested sophomores and juniors. Project INFOE and CACI were helpful in these career counseling efforts.

Computerized Assisted Career Information (CACI) was a locally initiated effort and coordinated by Mr. Marcus and implemented school system wide.

The following is a summary of that implementation effort:

Initial planning and research for a local computer application to career education began in February of 1972. Evaluation of results and costs of existing programs, nationwide, along with funding limitations influenced our decision to adopt a localized batch-processing system; utilizing as a base for our information, the job description portion of the project CVIS program.

Editing of descriptions, programming and testing was completed in August of 1972, and the program was introduced to all senior high schools between September and October of that year. Project staff members met with principals and guidance counselors in each high school, the program was explained and materials were left. Schools were instructed to begin processing requests in October. The program was given full endorsement by both the Vocational Education and Guidance Divisions of the Board of Education. By mid November, in response to inquiries from schools, the program was introduced and extended to all junior high schools (7-9) in the city.

Operating from October, 1972, through May of 1973, the CACI Program processed 17,141 student requests for career information. Requests were received for each of the 370 occupational descriptions on file. Most requests were processed within a three day period (student request-information sent to student), although there were occasional longer service periods because of conflicts for computer time, etc. Estimated cost, per student request, is about $.05.

As noted, CACI was operated on a system wide (7-12) basis. However, the nine schools having SPAN or a career education resource staff accounted for 19.4% of all requests.

In March of 1973, 138 guidance counselors, using CACI were asked to respond to the program. About 50% of those sent questionnaires responded. Their subjective comments and criticisms reinforced the staff's belief in the success of the program.

The following is a summary of the responses to the five objective questions asked:

1. Have you had an opportunity to use CACI? Yes 72 No 3
2. In what grades was the program used? The majority of use was in grades 9-12.
3. Do you feel the information provided has been beneficial to your students? Yes 68 No 2
4. In general, are you satisfied with the mechanics of the program? Yes 66 No 5
5. Do you anticipate a greater use of CACI at your school during the next school year? Yes 62 No or about the same use 9

It is obvious that the first year of CACI met with the acceptance and success anticipated. Plans have been made for continuation of the program through the 1973-74 school year. Modifications and expansions (including terminal application) have been proposed and some will be implemented or tested in the coming school year.

ADMINISTRATION

The 1972-73 school year was designeated as a dissemination year for the project. Over 348 requests for information and materials have been processed by the project outside of our city school system (See Appendix H). This encompasses every state in the United States as well as India, West Germany, Canada and Formosa. Project staff and administration have appeared on three (3) television programs and ten (10) radio programs. Project administration and evaluatora have presented five presentations to national educational conferences and conventions. Eleven articles have been written for educational publications and four have been accepted for publication or published, at least five (5) exhibits have been held at variesstate and national conferences as of August 1, 1973.

The project produced two audio-visuals for use in the dissemination activities. One was a twenty-one minute filmstrip and tape presentation covering all project phases. This was used at all national regional, and local dissemination activities. A copy of a thiry-minute color television program presented over Channel 3 - CBS Television was purchased for use also in these dissemination activities.

Numerous local articles have been published (See Appendix I). Thirty-four people outside our city school system and from varied systems both within and outside the State of Tennessee have visited the project during this 1972-73 school year.

Staff Utilization: 1972-73 School Year

James E. Hugueley	Project Director-Employed Sept. 1, 1970
Jerry Turpin	Elementary Curriculum Specialist - employed June 1, 1971
Barbara DeLee	Secretary, Northside Headquarters Office - employed August 24, 1970
Geneva Davis	Clerk-typist, Northside Headquarters employed November 27, 1972
Marshall Marcus	Job Placement Coordinator, Northside Headquarters employed October 16, 1970
John Coulthurst	Job Placement Coordinator, Westside High-employed December 14, 1970
Joyce Bousson	Elementary Career Education Resource Teacher employed August 31, 1972
Lorraine Bell	Elementary Career Education Resource Teacher employed August 31, 1972

Thelma Nelms	Career Education Resource Teacher, Humes Junior High, employed Sept. 7, 1971
Minetta Hill	Career Education Resource Teacher, Cypress Junior High, employed October 15, 1971
Jother Locke	Co-op Coordinator, Northside Headquarters employed September 15, 1971

E. Evaluation of the Project

A comprehensive final three year evaluation report by our third party evaluators can be found in Appendix J.

F. Conclusions, Implications, and Recommendations for the Future

Looking back over three years, some major acomplishments can be highlighted and conclusions drawn on their implications regarding the Memphis City Schools and the future of career education. The project administration was successful in recruiting and selecting a superior staff of dedicated professionals. They saw the desperate need for career education and set about implementing and "selling" the concept to our school system. They gave unselfishly of their time and efforts both during school hours and many times at night and weekends. The elementary phase of the project successfully wrote, filmed and edited ten programs highlighting ten of the fifteen career clusters for use over local educational television. These films have been utilized for two school years and will continue next school year. An elementary instructional television teacher packet of three hundred pages of games, puzzles, and varied "hands-on" activities was written and made available to all fourth, fifth and sixth grade teachers (approximately 1800 system-wide). Many motivated teachers at all elementary grade levels (K-6) submitted and implemented varied career education units in their classrooms. Students benefited greatly by "career awareness" activities enhanced by hundreds of field trips and resource speakers on a multitude of career areas. Local business contributed untold man hours to this venture. The junior high phase of the project successfully conducted exploratory activities of various kinds in all of the fifteen career clusters. They added to the curriculum practices at this level by writing and implementing six varied guides and worktexts for junior high teachers. Career posters and career brochures written by the staff added much to this successful effort. Project INFOE and CACI (which was implemented school system wide), proved to be invaluable in these "exploratory activities. The high school staff vigorously tackled the problems of career focus and placement and set as its goal - 100% placement of exiting seniors.

As tenure of the project effort ended the expertise developed was netting approximately 95% success. Many hundreds of young men and women received supervised work experiences and career jobs through their efforts.

We feel that the project has successfully realized the objectives and goals set forth in the original proposal. It has been demonstrated that the gap between industry, business and education can be SPANNED. I has proven itself and justified the "career education needs" to the public. Some recent events that we feel tend to substantiate these claims are as follows:

1. The Memphis Board of Education has allocated $137,000. in its budget to continue and expand career education efforts during the 1973-74 school year to all four areas in the school system.
2. The professional staff of the local career education effort has been expanded by four additional personnel.
3. The State of Tennessee legislature and state department staff are diligently researching and planning the addition of one vocational (career) guidance counselor for every two hundred (200) students in grades 7-12. The State Legislative passage of funds necessary to implement is expected in the spring of 1974. The bill was passed during the 1973 session. The plan directs that at least 50% of all students in our schools be reached (9-12) through vocational programs by 1975.

NOTE: This proposal in essence would provide individuals to all schools in Tennessee like our junior and senior high SPAN staff members.

In summary, all elements of the project have tended to suggest significant merit and will be expanded by our local school system during next school year.

James E. [illegible]
Signature of Project Director

August 31, 1973
Date

W.A. McGinnis
Approved: Director of Vocational Education

SUMMARY OF APPENDICES

Appendix A	Elementary Instruction Television Series
Appendix B	Placement Figures for Target Area Graduating Seniors
Appendix C	Junior High General Cooperative Education Classes Enrollment and Placement
Appendix D	Career Orientated Field Trips of Target Area
Appendix E	Information Needed for Occupational Entry System (Project INFOE)
Appendix F	Bibliography of Locally Produced (SPAN) Curriculum Materials
Appendix G	Sample Print-out to Student from Computerized Career Information System (CACI)
Appendix H	Requests for Materials and Information on Project SPAN (Dissemination)
Appendix I	Example of Published Articles/Dissemination Programs
Appendix J	Final Evaluation Report

APPENDIX A

Elementary Instruction Television Series

SPAN ITV SCHEDULE

	OCCUPATIONAL CLUSTER	
SEPT/1971	WHY DO PEOPLE WORK - INTRODUCTORY	Sept. 13, 15, 17 (10:00-10:15)
SEPT/1971	CONSTRUCTION OCCUPATIONS	Sept. 27, 29, Oct. 1 (10:00-10:15)
OCT/1971	TRANSPORTATION OCCUPATIONS	Oct. 18, 20, 22 (10:00-10:15)
NOV/1971	HEALTH OCCUPATIONS	Nov. 22 (2:30), 23 (2:10), 24 (9:15)
DEC/1971	BUSINESS AND OFFICE OCCUPATIONS	Dec. 13 (8:30, 2:10, 2:45)
JAN/1972	COMMUNICATIONS AND MEDIA OCCUPATIONS	Jan. 20 (8:45, 11:00, 1:30)
FEB/1972	MANUFACTURING OCCUPATIONS	Feb. 28 (1:50, 2:30)
MAR/1972	MARKETING AND DISTRIBUTION OCCUPATIONS	Mar. 22 (8:45, 10:30, 2:30)
APR/1972	GENERAL AND PERSONAL SERVICE OCCUPATIONS	Apr. 4 (8:45, 10:30, 2:30)
MAY/1972	CONSUMER AND HOMEMAKING-RELATED OCCUPATIONS	May 11 (8:45, 10:30, 2:30)

NOTE: TEACHER PACKETS WILL BE SENT TO ALL FIFTH AND SIXTH GRADE TEACHERS PRIOR TO THE SHOWING OF THE FILM OVER WKNO T.V. - CHANNEL 10.

TEACHER AIDES WILL ROTATE THROUGH ALL FIFTH AND SIXTH GRADE CLASSROOMS IN FOURTEEN ELEMENTARY SCHOOLS IN OUR TARGET AREA IN NORTH MEMPHIS. ALL OTHER FIFTH AND SIXTH GRADE TEACHERS MAY REQUEST TEACHER PACKETS FROM THEIR AREA SUPERINTENDENT' OFFICE.

1972-73 School Year
PROJECT SPAN AND WKNO

INSTRUCTIONAL TELEVISION SERIES

ON ELEMENTARY CAREER EDUCATION

FILM TITLE and CAREER CLUSTER	DATE OF TELECAST	TIME	PAGES IN TEACHER'S GUIDE FOR STUDENT ACTIVITIES
WHY DO PEOPLE WORK? Introductory Film	Sept. 8	11:45, 2:00, 2:30	Foreword, 1, 2
WHO BUILDS OUR HOUSES? Construction Careers	Oct. 3 Oct. 5	9:25 8:45, 10:30, 2:30	3 - 42
WHO WORKS IN OFFICES? Business and Office Careers	Nov. 22	8:45, 10:30, 1:15	71 - 104
WHO HELPS US COMMUNICATE? Communication & Media Careers	Jan. 3	8:45, 10:30, 12:30	43 - 70
WHO KEEPS US HEALTHY? Health Careers	Jan. 24	9:15, 12:30, 1:45	105 - 146
WHO MAKES OUR FURNITURE? Manufacturing & Industrial Careers	Feb. 14, 15, 16	8:30 daily	147- 174
WHO KEEPS US MOVING? Transportation Careers	March 12	8:45, 10:30, 12:30	175 - 216
WHO GIVES US SERVICES? Personal & Public Service Careers	April 25	9:15, 10:30, 12:50	217 - 258
WHO FEEDS US? Consumer & Homemaking-Related Careers	May 10	8:45, 10:30, 2:15	259 - 284
WHO SELLS US GOODS? Marketing & Distribution Careers	May 21	8:45, 10:30, 12:30	285 - 300

All fourth, fifth and sixth grade teachers in the Memphis City Schools should have a teacher's guide. If you do not, call the SPAN office at 274-1351 and we will send one to you. You are requested to view the series at one

WKNO-TV
CHANNEL 10

INSTRUCTIONAL TELEVISION SERIES SCHEDULE

ELEMENTARY CAREER EDUCATION FOR GRADES 4, 5, AND 6
1973 - 74 School Year

FILM TITLE	DATE OF TELECAST	TIME	PAGES IN TEACHER'S GUIDE FOR STUDENT ACTIVITIES
WHY DO WE WORK?	SEPTEMBER 7, 1973	11:45, 2:00, 2:30	Foreword, 1, 2
WHO BUILDS OUR HOUSES?	OCTOBER 4, 1973	9:40, 11:10, 1:10	3 - 42
WHAT ARE OFFICE OCCUPATIONS?	NOVEMBER 21, 1973	8:45, 10:30, 1:15, 2:15	71 - 104
WHO HELPS US COMMUNICATE?	JANUARY 2, 1974	8:45, 10:30, 1:15, 2:15	43 - 70
WHO KEEPS US HEALTHY?	JANUARY 18, 1974	8:45, 10:30, 12:30, 2:10	105 - 146
WHO MAKES OUR FURNITURE?	FEBRUARY 28, 1974	8:45, 10:30, 12:50, 1:50	147 - 174
WHO KEEPS US MOVING?	MARCH 1, 1974	8:45, 10:30, 12:50, 1:50	175 - 216
WHO HELPS US?	APRIL 4, 1974	8:45, 10:30, 12:50, 1:50	217 - 258
WHO FEEDS US?	APRIL 16, 1974	8:45, 10:30, 12:30, 1:50	259 - 284
WHO SELLS US THINGS?	MAY 8, 1974	8:45, 12:50, 1:45	285 - 300

NOTE: Teachers are reminded that three copies of each film in the series are available from each area office. If you should miss a telecast, please request a copy which can be shown on a 16mm projector from your elementary consultant or career education resource teacher.

Each 4th, 5th, and 6th grade teacher should have a copy of the teacher's guide (copies were provided each school) that accompanies the series. If not, please call the SPAN office at 274-1351 and request a copy.

PLEASE POST IN CLASSROOM

APPENDIX B

Placement Figures for Target Area Graduating Seniors

PLACEMENT ACTIVITIES OF

WESTSIDE HIGH SCHOOL SENIORS
(1971-72) (1972-73)

GOAL: 100% placement of exiting seniors

Placement Category	1971-1972	1972-73
Apprenticeship programs	4	8
Area Vocational School	2	5
Technical Schools	16	16
Military	10	6
College	36	34
Employed (full-time jobs)	82	50
Not placed	8	5
Total graduated	158	124
Total placement	150	116
Percentage placed	94.9	96

NORTHSIDE HIGH SCHOOL SENIORS
(1971-72) (1972-73)

GOAL: 100% placement of exiting seniors

Placement Category	1972	1973
Apprenticeship Program	21	3
Military	25	23
Summer Vocational Program	0	56
Area or Trade School	21	63
College	58	113
Employed	103	108
Unemployed	36	7
Not able to follow up	96	13
Total graduated	360	386
Total Placements	207	366
Percentage of Placement	84.3%	94.8%

APPENDIX C

Junior High General Cooperative Education Classes Enrollment and Placement

*CLASS ENROLLMENTS IN GENERAL COOPERATIVE TRAINING CLASSES DURING THE SECOND SEMESTER 1971 SCHOOL YEAR AT CYPRESS AND HUMES JUNIOR HIGH SCHOOLS

HUMES JR. HIGH	MALE	10	
	FEMALE	5	(86.6% Placement)
	** PLACEMENTS	13	
CYPRESS JR. HIGH	MALE	15	
	FEMALE	2	(70.6% Placement)
	** PLACEMENTS	12	

*These students were at least 16 years of age and in the 8th or 9th grade in school. They attended class for one hour daily and were released from school in the afternoon.

**Represent placements in a part-time, paid position in business and industry. These figures reflect efforts from January 21 through May 31, 1971. Efforts are continuing during the summer to affect total placement. These students are visisted regularly on the job.

GENERAL CO-OP TRAINING CLASSES

1971-72 Placement

(Junior High - 16 plus aged students)

HUMES JUNIOR HIGH

Gross enrollment during year	30
Number who did not complete	5
Net enrollment	27
Total placed	22
Percentage of net enrollment placed	81%

CYPRESS JUNIOR HIGH

Gross enrollment during year	38
Number who did not complete	11
Net enrollment	27
Total placed	20
Percentage of net enrollment placed	74%

1972 - 1973 SCHOOL YEAR PLACEMENT

TREZEVANT/CYPRESS JUNIOR HIGH GENERAL CO-OP

* Students enrolled in class 13

Students placed on part-time jobs 7

Students registered for high school 13

Percentage of Placement (jobs) for those enrolled 54%

Percentage of Enrollment registered for high school 100%

*Five students were lost due to the implementation on busing order. These students did not transfer to Trezevant from Cypresss in Jan. 1973.

Teacher-Coordinator, Miss Minetta Hill

HUMES JUNIOR HIGH GENERAL CO-OP

Students enrolled in class 17

* Students placed on part-time jobs 17

Students registered for high school 17

Percentage of Placement (jobs) for those enrolled 100%

Percentage of Enrollment registered for high school 100%

*Five additional students are working part-time, but not enrolled in the General Co-op class. They reached the age of sixteen after class was formed in Fall, 1972.

Teacher-Coordinator, Miss Thelma Nelms

APPENDIX D

Career Orientated Field Trips of Target Area

SUMMARY OF "CAREER ORIENTATED" FIELD TRIPS

1971 - 72: School Year

83 Field trips conducted
30 students per class (average

Total 2,490 students served with field trips

1972 - 73: School Year

404 Field trips conducted
30 students per class (average)

Total 12,120 students served with field trips

Each student in our target area population averaged a minimum of 1.5 field trips each during the 1972-73 school year.

CAREER ORIENTATED FIELD TRIPS

August 1971 through August 1972

Northside High	McDonald's/Stax Records
Cypress Jr. High	Wellington Clinic
Humes Jr. High	Lowenstein's
Humes Jr. High	Paper Company on Lamar
Westside High	South Central Bell
Cypress Jr. High	Wellington Clinic
Northside High	LeMoyne Owen College
Humes Jr. High	Northside High School
Caldwell Elementary	Memphis-Arkansas Bridge
Cypress Jr. High	Smucker's Company
Caldwell Elementary	Memphis-Arkansas Bridge
Northside High	Methodist Hospital
Cypress Jr. High	Hart's Bakery
Westside High	Northside High School
Caldwell Elementary	Airport
Caldwell Elementary	Airport
Northside High	Arlington Hospital
Caldwell Elementary	Airport
Hyde Park Elementary	Creative Valley Art Co.
Hyde Park Elementary	Library - Peabody & McLean
Hyde Park Elementary	Ellis Auditorium
Cypress Junior High	A & P Mill Industry
Cypress Jr. High	LeMoyne Owen College
Northside High	Goldsmith's
Northside High	Baptist Hospital
Hyde Park Elementary	Federal Buidling
Hyde Park Elementary	Goldsmith's
Hyde Park Elementary	Federal Building
Northside High	Holiday City
Northside High	National Cemetary
Cypress Jr. High	Stax Record Company
Cypress Jr. High	Memphis Light, Gas and Water
Hyde Park Elementary	Morrison's Cafeteria
Hyde Park Elementary	Airport
Hyde Park Elementary	Continental Bakery
Hyde Park Elementary	Nat Buring Packing Company
Cypress Jr. High	Northside High School
Cypress Jr. High	Northside High School
Cypress Jr. High	Northside High
Cypress Jr. High	Northside High
Cypress Jr. High	Northside High
Northside High	Desoto Post Office

Melrose High	Taystee Bakery
Melrose High	Raleigh Springs Mall
Gordon Elementary	Smucker's Co.
Gordon Elementary	Coca Cola Company
Caldwell Elementary	Commercial Appeal
Caldwell Elementary	Commercial Appeal
Caldwell Elementary	Commercial Appeal
Caldwell Elementary	Commercial Appeal
Hyde Park Elementary	Continental Bakery
Hyde Park Elementary	Continental Bakery
Hyde Park Elementary	Continental Bakery
Pope Elementary	Humes Junior High School
Merrill Elementary	Humes Junior High School
Hyde Park Elementary	Airport
Klondike Elementary	Humes Junior High School
Maury Elementary	Pink Palace Museum
Guthrie Elementary	Humes Junior High School
Hyde Park Elementary	Continental Bakery
Springdale Elementary	Stax Recording Company
Caldwell Elementary	Pepsi Cola Company
Caldwell Elementary	Pink Palace Museum
Gordon Elementary	Airport
Chicago Park Elementary	Memphis Arkansas Bridge/WMC-TV
Caldwell Elementary	Airport/Picadilly
Northside High	Southland Mall
Northside High	Overton Park
Guthrie Elementary	Smucker's Company
Guthrie Elementary	Taystee Bakery
Northside High	Memphis Furniture Company
Springdale Elementary	Armour Training Center
Melrose High	LeMoyne-Owen College
Chicago Park Elementary	Pepsi Cola/Continental Bakery
Hyde Park Elementary	I. B. Howard Farm
Hyde Park Elementary	Frito Lay, Inc.
Chicago Park Elementary	Commercial Appeal
Hyde Park Elementary	Airport
Grant Elementary	Humes Junior High
Fairview Junior High	Overton Park Zoo
Fairview Junior High	Chucalissa Indian Village
Humes Junior High	Holiday Inn Rivermont
Humes Junior High	Overton Park

FIELD TRIPS SEPTEMBER 1972 - NOVEMBER 1972

Springdale Elementary	Firestation
Northside High	Stax Records
Melrose High	State Technical Institute
Westside High	Plough

Melrose High	Crippled Children's Hospital
Springdale Elem	City Hall
Northside High	Cartwright Nursery
Melrose High	Goldsmith's
Springdale Elem.	Universal Life
Carnes Elem.	Commercial Appeal
Carnes Elem.	Fire Station 8
Carnes Elem.	WDIA
Carnes Elem.	WDIA
Messick	Klondike
Airways Jr. High	Melrose
Airways Jr. High	Melrose
Klondike Elem.	Metro. Airport
Melrose High	Audubon Park
Northside High	Area School
Melrose High	Morrison's
Klondike Elem.	King Cotton Meat Co.
Springdale Elem.	WDIA
Springdale Elem	WDIA
Melrose High	Park Theater
Carnes Elem.	WDIA
Carnes Elem.	Midwest Dairy
Northside High	Firestone
Westside High	Park Theater
Klondike Elem.	King Cotton Meat Co.
Humes Jr. High	Dean's Dairy
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Klondike Elem.	Dean's Dairy
Carnes Elem.	Midwest Dairy
Carnes Elem.	Midwest Dairy
Carnes Elem.	Post Office
Springdale Elem.	WKNO
Carnes Elem	WDIA
Northside High	Morrison's
Northside High	Area School
Humes Jr. High	Dr. Aycock
Northside High	Dr. Aycock
Klondike Elem.	Health Dept.
Carnes Elem.	WDIA
Northside High	Memphis State
Fairview Jr. High	Weather Bureau
Fairview Jr. High	Weather Bureau

Hyde Park Elementary	Post Office
Humes Junior High	WHBQ Channel 13/Memphis Press Scimitar
Westside High School	Universal Life Insureance Company
Hyde Park Elementary	Nat Buring Packing Company
Cypress Junior High	Universal Life Insurance Company
Hyde Park Elementary	Public Library
Northside High	Memphis State University
Hyde Park Elementary	Weather Station - Airport
Northside High	Brittling Cafeteria
Humes Junior High	Federal Reserve Bank
Northside High	South Central Bell
Humes Junior High	Nat Buring Packing Company
Hyde Park Elementary	Coca Cola Company
Fairview Junior High	Memphian Theather
Klondike Elementary	Memphis Light, Gas and Water
Klondike Elementary	Memphis Light, Gas and Water
Hyde Park Elementary	C. M. E. Publishing House
Gordon Elementary	Snowden Junior High
Hyde Park Elementary	Memphis State University
Hyde Park Elementary	Memphis State University
Hyde Park Elementary	Continental Bakery
Hyde Park Elementary	Continental Bakery
Northside High	State Technical Instutite
Humes Junior High	Village Cinema
Northside High	Allen Steam Plant
Melrose High	Levitz Furniture
Gordon Elementary	Airport
Gordon Elementary	Memphis State University
Hyde Park Elementary	Continental Bakery
Hyde Park Elementary	WKNO-TV
Gordon Elementary	Humes Junior High
Fairview Junior High	Tech High School
Hyde Park Elementary	Memphis State University
Hyde Park Elementary	Memphis State University
Chicago Park Elementary	Pink Palace Museum
Northside High	Area Vocational School
Guthrie Elementary	Commercial Appeal
Gordon Elementary	Memphis State
Hyde Park Elementary	C.M.E. Publishing House
Hyde Park Elementary	Memphis State University
Hyde Park Elementary	Memphis Publishing Company
Hyde Park Elementary	Airport
Fairview Junior High	Memphis Light, Gas, & Water
Hyde Park Elementary	Malco Theater
Airways Junior High	Commercial Appeal
Hyde Park Elementary	Cleo Wrap
Northside High	Malco Theater
Cypress Junior High	Wonder Bakery, Coca Cola
Hyde Park Elementary	A&P Mill Industry

Melrose High	Audubon Park
Melrose High	Overton Park
Springdale Elem.	Martin/Herring
Springdale Elem.	Martin/Herring
Northside High	Metro Airport
Northside High	Ivers and Pond's
Northside High	Health Fair
Melrose Jr. High	Area School
Springdale Elem.	Health Fair
Humes Jr. High	Weather Station
Melrose Jr. High	Health Fair
Humes Jr. High	Health Fair
Northside High	Melrose High
Fairview Jr. High	Health Fair
Carnes Elementary	Northside High
Carnes Elementary	Health Fair
Cypress Jr. High	Health Fair
Airways Jr. High	Health Fair
Melrose High	American Textile
Springdale Elem	Memphis Publishing
Melrose Jr.	Weather Station
Springdale	Memphis Publishing
Melrose Jr.	Weather Station
Melrose High	Raleigh Mall
Melrose Jr.	Raleigh Mall
Carnes Elem.	Health Fair
Fairview Jr.	Chucalissa
Carnes Elem.	Fire Station
Carnes Elem.	Fire Station
Melrose High	Chelsea Greenhouse
Northsie High	LeMoyne Owen
Melrose Jr. High	Firestone
Melrose Jr. High	Firestone
Northside High	Melrose High
Melrose Jr. High	Firestone
Klondike Elementary	Rone's Farm
Melrose Jr.	Firestone
Fairview Jr.	City Hall
Northside High	Holiday City
Melrose Jr. High	Weather Station
Melrose Jr. High	Fairgrounds
Melrose Jr. High	Weather Station
Carnes Elem	Armour Training Station
Carnes Elem.	Armour Training Station
Cypress Jr. High	Midwest Dairy
Carnes Elem	Armour Training Station
Northside High	Melrose High
Northside High	Arlington Hospital
Northside High	Plough

Melrose High	Midwest Dairy
Carnes Elem	Fire Station
Cypress Jr.	Midwest Dairy
Carnes Elem.	Ballet
Carnes Elem.	Commercial Appeal
Carnes Elem.	Commercial Appeal
Carnes Elem.	WDIA
Carnes Elem	Airport
Humes Jr. High	Ellis Auditorium
Klondike Elementary	Airport
Melrose High	Cartwright Nursery
Carnes Elem.	McMallim and Robinson
Klondike Elem.	Police Station
Klondike Elem.	Airport
Klondike Elem.	Rone's Farm
Northside High	Commercial Appeal
Carnes Elem.	Firestation
Melrose High	Cartwright Nursery
Springdale Elem.	Public Library
Melrose Jr. High	Stax Records
Springdale Elem.	Board of Education
Northside High	Plough
Carnes Elem.	WDIA
Melrose Jr. High	Stax Records
Carnes Elem.	WDIA
Fairview Jr.	State Technical Institute
Carnes Elem.	Firestation
Carnes Elem	WDIA
Carnes Elem.	Firestation
Carnes Elem.	Stax Records
Melrose Jr.	Stax Records
Springdale Elem	Board of Education
Melrose Jr.	Stax Records
Springdale Elem.	Board of Education
Northside High	Plough
Northside High	B. T. Washington
Melrose Jr.	Stax Records
Melrose Jr.	Stax Records
Westside High	Telephone Co.
Springdale Elem	Board of Education
Melrose High	Veteran Admn.
Northside High	Plough Incorp.

FIELD TRIPS DECEMBER 1972 - FEBRUARY 1973

Melrose High	Stax Records
Northside High	Memphis State
Melrose High	Melrose High
Klondike Elem.	Memphis Queen

Northside High	WDIA
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Commercial Appeal
Carnes Elem.	Commercial Appeal
Carnes Elem.	Post Office
Springdale Elem.	Fire Station 13
Westside High	Union Planters
Klondike Elem.	Stax Records
Klondike Elem.	Coca Cola
Northside High	Tenn. Psy. Hospital
Springdale Elem.	Post Office
Springdale Elem.	Memphis Furniture
Springdale Elem.	Memphis Furniture
Springdale Elem.	Memphis Furniture
Springdale Elem.	Memphis Publishing
Springdale Elem.	Memphis Publishing
Springdale Elem.	Memphis Publishing
Springdale Elem.	Telephone Company
Fairview Jr.	Melrose
Springdale Elem.	Memphis Publishing
Northside High	Holiday Press
Melrose High	Memphian Theater
Melrose High	Post Office
Northside High	Firestone
Sherwood Jr. High	Melrose
Sherwood Jr. High	Melrose
Sherwood Jr. High	Melrose
Sherwood Jr. High	Melrose
Sherwood Jr. High	Melrose
Carnes Elem.	Commercial Appeal
Melrose High	Levi Strauss
Carnes Elem.	Fire Station 33
Carnes Elem.	Commercial Appeal
Carnes Elem.	Commercial Appeal
Klondike Elem	Armour Center
Carnes Elem.	Armour Center
Carnes Elem.	Armour Center
Carnes Elem.	Armour Center
Carnes Elem.	Armour Center
Carnes Elem.	WDIA
Carnes Elem.	Midwest Dairy
Carnes Elem.	WDIA
Carnes Elem.	Midwest Dairy

FIELD TRIPS MARCH 1973 - MAY 1973

Northside High	Area School
Carnes Elem	Stax Records
Carnes Elem	Stax Records
Fairview Jr.	Weather Station
Carnes Elem.	Stax Records
Melrose High	Audubon Park
Springdale Elem	Ivers and Pond's
Carnes Elem.	U. S. Post Office
Carnes Elem.	Stax Records
Melrose Junior	Southland Mall
Carnes Elem.	Fire Station
Springdale Elem.	Cleo Wrap
Carnes Elem.	Fire Station
Carnes Elem	Post Office
Springdale Elem.	Cleo Wrap
Fairview Junior	Crosstown Show
Carnes Elem	Cleo Wrap
Carnes Elem	Cleo Wrap
Northside High	Holiday Press
Carnes Elem.	Cleo Wrap
Springdale Elem.	Ivers and Pond's
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Carnes Elem.	Stax Records
Klondike Elem.	Memphis State
Carnes Elem.	Cleo Wrap
Carnes Elem.	Stax Records
Carnes Elem.	Post Office
Carnes Elem.	Post Office
Northside High	Universal Life
Springdale Elem	Cleo Wrap
Springdale Elem.	Memphis State
Westside High	CBI Nuclear
Carnes Elem.	Stax Records
Carnes Elem.	Cleo Wrap
Springdale Elem	Cleo Wrap
Humes Junior	Memphis State
Humes Junior	Penal Farm
Humes Junior	Northside
Springdale Elem.	Iver's Pond's
Carnes Elem	Cleo Wrap
Carnes Elem	Post Office
Humes Junior	Northside
Humes Junior	Northside
Humes Junior	Northside
Carnes Elem	Post Office
Northside High	Area School
Westside High	Brooks Art Gallery
Humes Junior	Northside

Northside High	Channel 13
Northside High	Holiday City
Melrose High	Memphis State
Humes Junior	Northside
Carnes Elem	Smuckers
Carnes Elem.	Cleo Wrap
Melrose High	USDA Cotton Div.
Springdale Elem.	Ivers and Pond's
Klondike Elem.	WDIA
Northside High	Memphis Publishing
Springdale Elem.	Pepsi Cola
Carnes Elem.	Cleo Wrap
Carnes Elem.	Pepsi Cola
Carnes Elem.	Cleo Wrap
Melrose Jr.	State Technical
Carnes Elem.	Cleo Wrap
Carnes Elem.	Universal Life
Melrose High	Arlington
Carnes Elem.	Stax Records
Northside High	Day Care Centers
Melrose High	Holiday Inn City
Carnes Elem.	Airport
Carnes Elem.	Stax Records
Carnes Elem.	Smuckers
Carnes Elem.	Armour Center
Springdale Elem.	Pepsi Cola
Carnes Elem.	Pepsi Cola
Carnes Elem.	Stax Records
Carnes Elem.	Smuckers
Springdale Elem.	Coca Cola
Fairview Jr.	Memphis Publishing
Carnes Elem.	Stax Records
Springdale Elem.	Coca Cola
Carnes Elem.	Stax Records
Springdale Elem.	Levi Strauss
Carnes Elem.	Schlitz
Carnes Elem.	Smuckers
Klondike elem	WMC T.V.
Northside High	Memphis State
Melrose High	DuPont
Springdale Elem	Coca Cola
Northside High	Overton Park
Northside High	Plough
Carnes Elem.	Armour Center
Springdale Elem	Pepsi Cola
Carnes Elem.	Post Office
Carnes Elem.	Pepsi Cola
Carnes Elem.	Stax Records
Carnes Elem.	Armour Center
Carnes Elem.	Smuckers
Carnes Elem.	Universal Life
Carnes Elem.	Stax Records
Carnes Elem.	Schlitz
Fairview Jr.	Plough

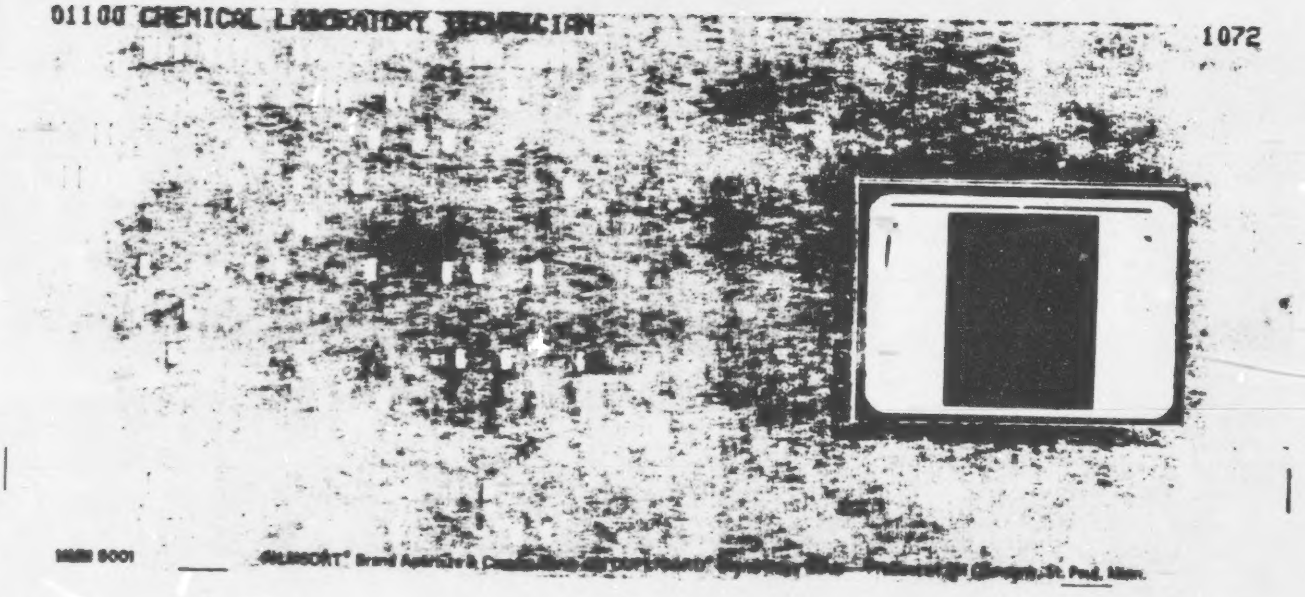
Carnes Elem.	Smuckers
Melrose High	Sealy Mattress
Springdale Elem.	Pepsi Cola
Carnes Elem	Pepsi Cola
Carnes Elem.	Armour Center
Springdale Elem.	Colonial Bakery
Klondike Elem.	Memphis State
Humes Jr.	International Harvester
Carnes Elem.	Smucker's
Carnes Elem.	Smucker's
Springdale Elem.	Colonial Bakery
Humes Junior	LeMoyne Owen College
Springdale Elem	Kimberly Clark
Springdale Elem.	Smucker's
Melrose High	Adult Ed. Center
Northside High	Area Voc. School
Northside High	State Technical
Northside High	Area School
Springdale Elem.	Pepsi Cola
Springdale Elem.	Overton Zoo
Carnes Elem.	Pepsi Cola
Springdale Elem.	Overton Zoo
Northside High	Shelby State
Carnes Elem.	Schlitz
Carnes Elem.	Southland Mall
Various Schools	Woodale Senior High
Carnes Elem.	Southland Mall
Carnes Elem.	Southland Mall
Fairview Jr.	Southland Mall
Carnes Elem.	Southland Mall
Carnes Elem.	Universal Life
Carnes Elem.	Airport
Carnes Elem.	Southland Mall
Carnes Elem.	Southland Mall
Snowden Jr.	Northside High
Springdale Elem.	Smucker's
Carnes Elem.	Airport
Northside High	Universal Life
Springdale Elem	Smucker's
Carnes Elem.	Post Office
Carnes Elem.	Airport
Carnes Elem.	Overton Park
Melrose High	Northside
Northside High	Arlington
Springdale Elem.	Adult Ed. Center
Springdale Elem.	Smucker's
Melrose High	Morrison's
Carnes Elem.	Overton Park
Sherwood Jr.	Pink Palace
Carnes Elem.	Pink Palace
Carnes Elem.	Airport
Northside High	Zoo

Carnes Elem.	Airport
Northside High	Baptist
Carnes Elem.	Smucker's
Carnes Elem.	Airport
Humes Jr.	WDIA
Northside High	Baptist
Springdale elem.	Zoo

APPENDIX E

Information Needed for Occupational Entry System (Project INFOE)

SAMPLE INFOE CARD



01100 CHEMICAL LABORATORY TECHNICIAN

1072

APPENDIX F

Bibliography of Locally Produced (SPAN) Curriculum Materials

PROJECT SPAN

BIBLIOGRAPHY OF LOCALLY-PRODUCED MATERIALS

Elementary: Grades K-6

A. Ten Career Education Instructional Television Films on nine occupational clusters as follows:

A teacher guide has been constructed for each film. This guide includes "hands-on" activities and directions, supplementary materials for classroom use and vocabulary words and many other suggestions for implementation in nine career clusters.

Occupational Clusters in Series and Packets

WHY DO PEOPLE WORK? - INTRODUCTORY
CONSTRUCTION OCCUPATIONS
TRANSPORTATION OCCUPATIONS
HEALTH OCCUPATIONS
BUSINESS AND OFFICE OCCUPATIONS
COMMUNICATIONS AND MEDIA OCCUPATIONS
MANUFACTURING OCCUPATIONS
MARKETING AND DISTRIBUTION OCCUPATIONS
GENERAL AND PERSONAL SERVICE OCCUPATIONS
CONSUMER AND HOMEMAKING - RELATED OCCUPATIONS

These can be used with fourth, fifth, and sixth grade-level students.

B. Packet of Career Education Units integrating the concept in subjects in grades kindergarten through 6 (21 units in packet).

C. Bulletin Board Ideas for Career Education Grades K-12. (100 ideas for teacher utilization).

Middle-School: Grades 7-9

D. Student workbook is entitled *Career Development Work Text for Junior High Students*. This work text can be utilized in all subject disciplines at grade 7.

E. A curriculum guide entitled *Career Education Curriculum Guide* for junior high school grade level 7, 8, and 9 in all subject areas.

F. Curriculum Guide for Occupation Orientation and Career Education in Industrial Arts and Home Economics in Grades 8 and 9.

G. Course of study for General Cooperative Education at Grade 9. This course of study covers two semesters of work.

High School Level: Grades 10-12

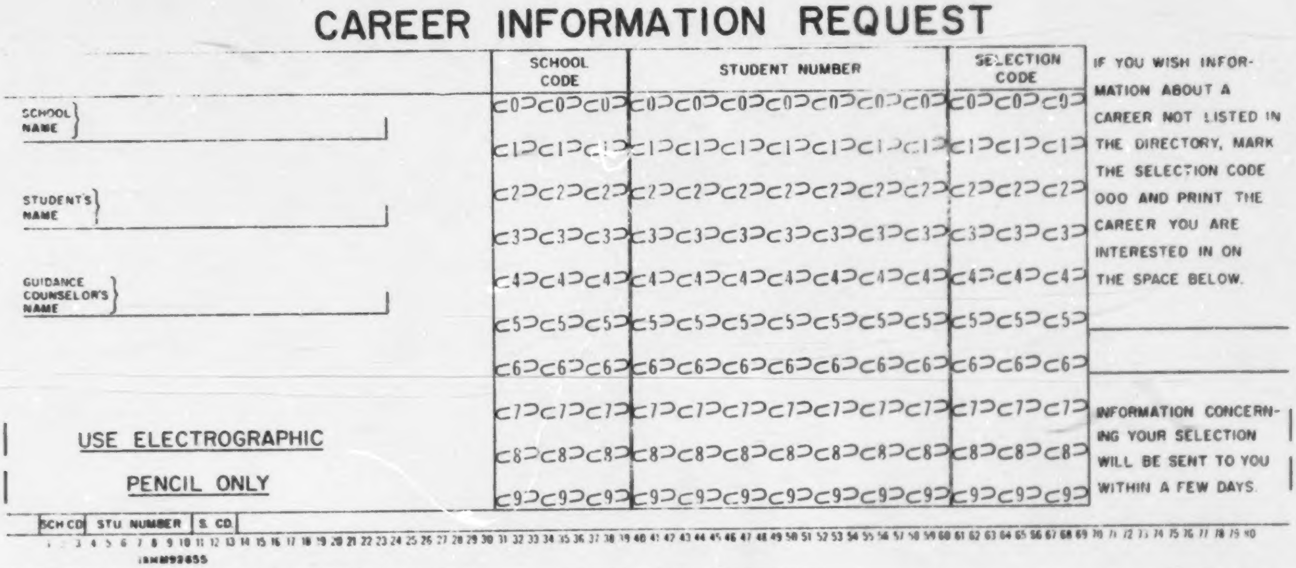
H. Course of study for General Co-operative Education at the Senior High Level, Grades 11 and 12

I. Charts depicting careers (jobs) relating to interest in fifteen subject areas.

APPENDIX G

Sample Print-out to Student from Computerized Career Information System (CACI)

MARK SENSE CARD USED IN C. A. C. I. SYSTEM



CAREER INFORMATION REQUEST

SCHOOL NAME

STUDENT'S NAME

GUIDANCE COUNSELOR'S NAME

USE ELECTROGRAPHIC PENCIL ONLY

SCHOOL CODE			STUDENT NUMBER							SELECTION CODE		
⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃	⊂0⊃
⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃	⊂1⊃
⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃	⊂2⊃
⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃	⊂3⊃
⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃	⊂4⊃
⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃	⊂5⊃
⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃	⊂6⊃
⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃	⊂7⊃
⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃	⊂8⊃
⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃	⊂9⊃

IF YOU WISH INFORMATION ABOUT A CAREER NOT LISTED IN THE DIRECTORY, MARK THE SELECTION CODE 000 AND PRINT THE CAREER YOU ARE INTERESTED IN ON THE SPACE BELOW.

INFORMATION CONCERNING YOUR SELECTION WILL BE SENT TO YOU WITHIN A FEW DAYS.

SCH CD	STU NUMBER	S. CD

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

IBMM92855

YOU MAY WISH TO DISCUSS IT WITH YOUR FAMILY AND FRIENDS. THIS DESCRIPTION IS

EVELYN K CRUTCHFIELD
1350 VANCE
134 - MELROSE HIGH 00 62

HERES THE CAREER INFORMATION YOU REQUESTED. PLEASE REVIEW IT CAREFULLY. YOU MAY WISH TO DISCUSS IT WITH YOUR FAMILY AND FRIENDS. THIS DESCRIPTION IS NOT, OF COURSE, A TOTAL ANALYSIS OF THE CAREER DESCRIBED, BUT IT SHOULD PROVIDE SOME ANSWERS TO MANY OF THE QUESTIONS YOU MAY HAVE.

PRACTICAL NURSE

ACTIVITIES= PRACTICAL NURSES PERFORM MANY JOB DUTIES. THEY MAY BE EMPLOYED FOR THE NURSING CARE OF NEWBORN BABIES, THE AGED, THE HANDICAPPED, THE MENTALLY ILL, OR TO NURSE INDIVIDUALS WITH OTHER TYPES OF NEEDS OR SICKNESSES. IN THEIR WORK, PRACTICAL NURSES CARRY OUT PRESCRIBED MEDICAL TREATMENTS, KEEP CHECKS ON TEMPERATURE AND BLOOD PRESSURE READINGS, ADMINISTER DRUGS AND MEDICATIONS AS THEY ARE INSTRUCTED, AND CARE FOR THE COMFORT, PERSONAL CLEANLINESS, AND HYGIENE OF THE PATIENT. IN DOCTOR'S OFFICES AND HOSPITALS PRACTICAL NURSES ASSIST IN THE PREPARATION OF PATIENTS FOR EXAMINATIONS AND OPERATIONS, PERFORM SIMPLE ROUTINE LABORATORY TESTS, AND, IN SOME CASES, ARE RESPONSIBLE FOR CLERICAL DUTIES. IF EMPLOYMENT IS IN A PRIVATE HOME, THE DUTIES MAY BE MORE VARIED. IN SOME INSTANCES, PRACTICAL NURSES ARE EMPLOYED BY PUBLIC HEALTH AGENCIES. IN THIS ROLE, THEY MAKE HOME VISITS TO PATIENTS AND TAKE AN ACTIVE PART IN COMMUNITY HEALTH PROGRAMS.

REQUIREMENTS= HIGH SCHOOL STUDENTS INTERESTED IN PRACTICAL NURSING SHOULD POSSESS PATIENCE, EMOTIONAL STABILITY, DEPENDABILITY, TACT, AND A DESIRE TO BE OF SERVICE. ALL STATES NOW REQUIRE THAT APPLICANTS PASS AN EXAMINATION TO BECOME LICENSED AS PRACTICAL NURSES. APPLICANTS MUST HAVE GRADUATED FROM AN APPROVED SCHOOL OF PRACTICAL NURSING BEFORE TAKING THEIR EXAMINATION. STUDENTS SHOULD BE CAUTIOUS BEFORE ENROLLING IN A PRACTICAL NURSING SCHOOL TO MAKE SURE THAT THE SCHOOL IS AN ACCREDITED ONE.

WORKING CONDITIONS= HOSPITALS ARE USUALLY CLEAN, NEAT, AND PLEASANT PLACES TO WORK. HOWEVER, THE OBSERVATION AND CARE OF PERSONS IN PAIN MAY BE DEPRESSING. THE WORK CAN BE PHYSICALLY AND MENTALLY STRENUOUS AND OFTEN A GREAT DEAL OF BENDING, STRETCHING, STOOPING, AND LIFTING IS REQUIRED. THERE IS ALSO THE POSSIBILITY OF EXPOSURE TO CONTAGIOUS OR INFECTIOUS DESEASE. PRACTICAL NURSES WORK 8-HOUR DAYS, BUT MAY HAVE TO WORK NIGHTS AND WEEKENDS ALSO.

EARNINGS= BEGINNING SALARIES FOR LICENSED PRACTICAL NURSES AVERAGED ABOUT $508 PER MONTH IN 1970.

EVELYN , THE ABOVE HAS BEEN A BRIEF DESCRIPTION OF THE CAREER YOU SELECT IF YOU ARE INTERESTED IN PURSUING IT OR OBTAINING ADDITIONAL INFORMATION, FEEL FREE TO MAKE AN APPOINTMENT TO DISCUSS THIS WITH A COUNSELOR AT -- MELROSE HIGH

APPENDIX H

Requests for Materials and Information on Project SPAN

SUMMARY OF REQUESTS RECEIVED AND ANSWERED
FOR MATERIALS AND INFORMATION ON SPAN

School Year: 1971-1972

Ninety inquiries received and answered

School Year: 1972-1973

Two hundred sixty eight inquiries received and answered

We have received inquiries for all fifty states and four foreign countries.

Requests Answered and Completed for SPAN Materials

September, 1971

Mr. John P. Acuff
Route #4
Sweetwater, Tennessee 37874

Mr. William J. Callahan
Coordinator
Career Education Services
Santa Barbara County Schools
Santa Barbara, California

Mr. Carl Deskins, Jr.
Coordinator of Four I's and
Career Education
Dileno Wisco Educational Cooperative
1032 Virginia Avenue
Norton, Virginia 24273

Mr. Kenneth G. Densley
Research Consultant
Department of Education
State Education Building
721 Capitol Mall
Sacramento, California 95814

Mr. H. M. De Petro
Director/Operation Bridge
Aims Community College
P. O. Box 69
Greeley, Colorado 30631

Mr. Clayton R. Haynes
Project Director
1003 South College
Covington, Tennessee 38019

Mr. John D. Hlavach, Director
Vocational and Technical Education
Peoria Public Schools
3202 N. Wisconsin Avenue
Peoria, Illinois 61603

Mr. Norbert Johnson
Apartment #3
100 North 32nd Avenue
Hattiesburg, Mississippi 39401

Mr. Harold Kafer
Administrative Assistant
Intermediate School
District Number 104
P. O. Box 605
Ephrata, Washington 98823

Mr. Gordon F. Law
Chairman
Rutgers University
Department of Urban Education
Vocational-Technical Education
New Brunswick, New Jersey 08903

October, 1971

Miss Judith Anderson
Project Director
SRA
259 East Erie Street
Chicago, Illinois 60611

Mr. John E. Bagwell
Superintendent
Fayette County Schools
Somerville, Tennessee 38068

Mr. Robert E. Bauer
Exemplary Project Supervisor
Helena Vocational-Technical Center
1115 Roberts
Helena, Montana 59601

Mrs. Bloom
Mt. Pisga High School
1444 Pisgah Road
Cordova, Tennessee 38108

Mr. Keith Goldhammer
Visiting Scholar
Vocational-Technical Education
Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

Mr. Thomas Pichette
Project Director, World of Work
Menominee Middle School
Minominee, Michigan 49858

November, 1971

Mr. George King
Supervisor of Career Education
The Independent School
District of Boise City
1207 Fort Street
Boise, Idaho 83702

Mr. Aden Phillips, Coordinator
Occupational Vocational Education
Post Office Box 1031
700 Pacific Street
Monterey, California 93940

Miss Kim Powers
Career Counselor
Indiana Career Resource Center
1025 South Greenlawn
South Bend, Indiana 46615

Mr. Larry Selland
Project Director
State Office Building
900 East Boulevard Avenue
Bismarck, North Dakota 58501

Mr. Jim C. Wilds
Woodford County Vocational
Agriculture Department
Woodford County High School
Versailles, Kentucky 40383

Mr. A. C. Williams
Radio Station WDIA
P. O. Box 12045
Memphis, Tennessee 38112

Mr. Maurice Prince
Guidance and Counseling Unit
General Education Services
Box #402
Lansing, Michigan 48902

December, 1971

Mrs. Carolyn Brown
Elementary Guidance Specialist
Indiana Career Guidance Center
Project View
Indiana University
715 E. Seventh Street
Bloomington, Indiana 47401

January, 1972

Ms. Judith EnDean
60 Jackson
Denver, Colorado 80206

Mr. Charles P. Evingham
Coordinator of Guidance Services
1050 Maryvale Drive
Cheektowaga, New York 14225

Mr. G. Lennhoff
Industrial Arts
West Hempstead Schools
400 Nassau Boulevard
West Hempstead, New York 11552

Mr. Edward R. Brewer
Director of Federal And
State Programs
Mountain View School District
Kingsley, Pennsylvania 18826

Mr. Gary L. Duncan
Career Orientation Specialist
Wichita Public Schools
Division of Vocational and
continuing Education
1847 N. Chautauqua
Wichita, Kansas 67214

Mr. Alan B. Lesure
Editor
John Wiley & Sons, Inc.
Publishers
605 Third Avenue
New York, New York 10016

Mr. Donald Maxwell
Regional Coordinator of Occupational
Education for Region 10 N. Y. S.
Herkimer County Board of
Cooperative Educational Services
132 West German Street
Herkimer, New York 13350

Mr. John T. Michel
Elementary Resource
Person for Model Cities
Tucson Public Schools
P. O. Box 4040
1010 East Tenth Street
Tucson, Arizona 83717

Mr. Robert Newman, Principal
Ocean County Vocational-
Technical School
West Water Street
Toms River, New Jersey 08753

Mrs. Jeanne Ode, Project Director
CESA #5 Mobile Career Development Project
c/o River Falls Senior High School
River Falls, Wisconsin 54022

Vito R. Pace Associate Professor
Industrial Arts Education Division
State University College at Buffalo
1300 Elmwood Avenue
Buffalo, New York 14222

Ms. Ruby Parker
1581 Harvard
Witchita, Kansas 78203

Mrs. Elizabeth Powell
Administrative Assistant
Developmental Career Guidance E
Education Project
2030 East Broadway, Suite 102
Tucson, Arizona 85719

February, 1972

Mr. Larry J. Bailey, Ed. D.
Principal Investigator
Department of Occupational Education
Southern Illinois University
Carvondale, Illinois 62901

Mr. A. J. Beeler, Director
Division of Curriculum
Room 1103, Brown Education Center
675 South Fourth Street
Louisville, Kentucky, 40202

Mr. John Grantier, Career Counselor
Meadowdale Senior High School
6002 168th Street, S. W.
Lynnwood, Washington 98036

Ms. Janice C. Romney
Acting Administrator
Granite School District
340 East 2545 South
Salt Lake City, Utah 84115

Mr. Paul L. Sizemore
Coordinator of Career Education
Department of Education
Capitol Building
Cheyenne, Wyoming 82001

Mr. Richard A. Theodore
Project Coordinator
Exemplary Program for Occupational
Preparation
3059 Higgins boulevard
New Orleans, Louisiana 70126

May, 1972

Mr. Dennis K. Palmer
Director of Program Assessment
Test Department
Houghton Mifflin Company
Educational Division
110 Tremeon Street
Boston, Massachusetts 02107

Mr. Samuel E. Raper
Route #2, Box 66
Crossville, Tennessee 38555

Ms. Mary M. Stephens
2736 S. Seneca #Y-11
Wichita, Kansas 67217

Ms. Linda H. Taylor
Guidance Department
Central High School
Wartburg, Tennessee 37887

June, 1972

Mr. M. Robert Adkison, Ph. D.
District Superintendent
Ceres Unified School District
6th & Lawrence Streets
Ceres, California 95307

Mrs. Sylvia Compbell
Consultant-Coordinator
Career Education
600 West Bridge
Granbury, Texas 76048

July, 1972

Miss Tommie Lou Sevi
4321 Apollo Drive
Oklahoma City, Oklahoma

Mr. Larry G. Swenson
Vocational Counselor
Bay Shore Public Schools
155 Third Avenue
Bay Shore, New York 11706

Request for SPAN Materials (continued)

Tennessee County School Superintendents

Mr. McCoy Ross
Superintendent
Hardeman County Schools
Bolivar, Tennessee 38008

Mr. H. F. Snodgrass
Superintendent
Hardin County Schools
Savannah, Tennessee 38372

Mr. E. d. Thompson
Superintendent
Haywood County Schools
Brownsville, Tennessee 38012

Mr. G. Tillman Stewart
Superintendent
Henderson County Schools
Lexington, Tennessee 38351

Mr. Kermit Kemp
Superintendent
Henry County Schools
Paris, Tennessee 38242

Mr. James. W. Wilson
Superintendent
Lake County Schools
Tiptonville, Tennessee 38079

Mr. O. R. Taylor
Superintendent
Lauderdale County Schools
Ripley, Tennessee 38063

Mr. Julius S. Hurst
Superintendent
McNairy County Schools
Selmer, Tennessee

Mr. James L. Walker
Superintendent
Madison County Schools
Jackson, Tennessee 38301

Mr. George Blakemore
Superintendent
Obion County Schools
Union City, Tennessee 38261

Mr. Doyle Allen
Superintendent
Perry County Schools
Linden, Tennessee 37906

Mr. George H. Barnes
Superintendent
Shelby County Schools
Memphis, Tennessee 38112

Mr. Shannon Faulkner
Superintendent
Tipton County Schools
Covington, Tennessee 38019

Mr. Gordon Jenkins
Superintendent
Wayne County Schools
Waynesboro, Tennessee 38485

Mr. T. Mac Buckley
Superintendent
Weakley County Schools
Dresden, Tennessee 38225

Mr. T. H. Strange
District Superintendent
Crockett County Schools
Alamo, Tennessee 38001

Mr. Ira C. Powers
District Superintendent
Carroll County Schools
Atwood, Tennessee 38220

Mr. John Gulley
District Superintendent
Tipton County Schools
Covington, Tennessee 38019

Mr. Biggs Danner
District Superintendent
Crockett County Schools
Crockett Mills, Tennessee 38021

Mr. Sam E. Reed
District Superintendent
Dyer County Schools
Dyersburg, Tennessee 38024

Request for SPAN Material (continued)

Tennessee County School Superintendents

Mr. J. F. Bailey
District Superintendent
Crockett County Schools
Friendship, Tennessee 38034

Mr. Frank Latham
District Superintendent
Crockett County Schools
Gadsden, Tennessee 38337

Mr. Harold H. Reed
District Superintendent
Carroll County Schools
Bruceton, Tennessee 38317

Mr. Ralph Mays
District Superintendent
Gibson County Schools
Humboldt, Tennessee 38343

Mr. C. H. Pudor
District Superintendent
Carroll County Schools
Huntingdon, Tennessee 38344

Mr. Fred V. Standley
District Superintendent
Madison County Schools
Jackson, Tennessee 38301

Mr. Paul G. Caywood
District Superintendent
Henderson County Schools
Lexington, Tennessee 38351

Mr. Baxter Wheatley
District Superintendent
Carroll County Schools
McKenzie, Tennessee 38201

Mr. Jerry W. Smith
District Superintendent
Crockett County Schools
Maury City, Tennessee 38050

Mr. Julian Brewer
District Superintendent
Henry County Schools
Paris, Tennessee 38343

Mr. Ben A. Cunningham
District Superintendent
Hawkins County Schools
Rogersville, Tennessee 37857

Mr. Billy M. Crum
District Superintendent
Carroll County Schools
Clarksburg, Tennessee 38324

Mr. Basil C. Snider
District Superintendent
Carroll County Schools
Trezevant, Tennessee 38258

Mr. T. F. Wallace
District Superintendent
Obion County Schools
Union City, Tennessee 38261

Mrs. Betty Jo Douglass
Supervising Teacher
Benton County Schools
Camden, Tennessee 38320

Mr. James Forbess
Superintendent
Carroll County Schools
Huntingdon, Tennessee 38344

Mr. V. M. Plunk
Superintendent
Chester County Schools
Henderson, Tennessee 38340

Mr. I. M. Perry,
Superintendent
Crockett County Schools
Alamo, Tennessee 38001

December 1972

Ron Mittenmeyer, Counselor
Olathe District Schools
Box 2000
Olathe, Kansas 66061

Barbara Cole
Oregon Board of Education
942 Lancaster Drive, N.E.
Salem, Oregon 97310

Don E. Combrink, Project Director
Yuma County Career Education
512 W. 24th Street
Yuma, Arizona 85364

Thomas Pierson
Northern Michigan University
Marquette, Michigan 49855

Laquanah Crowder
Celina High School
Celina, Tennessee 38551

Kenneth Nance
Randolph County Schools
Asheboro, North Carolina 27203

Jane Francis
Career Education Center
1112 South Zarzamora - Rm 16
San Antonio, Texas 73207

George H. MacLeod
South Portland School Dept.
130 Wescott Road

Susan Freienmuth
Montgomery County Public Schools
850 North Washington Street
Rockville, Maryland 20850

Merle W. Wood, Consultant
Oakland Unified School District
1025 Second Avenue
Oakland, California 94606

Otto McClintick, Ph.D
Ritenour Consolidated School District
2420 Woodson Raod
St. Louis, Missouri 63114

Roberta Leigh
Educational Solutions, Inc.
80 Fifth Avenue
New York, N.Y. 10011

Ralph Bosch
LaLoma Junior High School
1800 Encina Avenue
Modesto, California

Charles L. Liggett, Coordinator
Work Education Experience Program
Metropolitan Nashville Public Schools
2601 Bransford Avenue
Nashville, Tennessee 37204

Jack Milkie
Prescott Senior High School
Prescott, Wisconsin 54021

Marvin R. Rasmussen
Portland Public Schools
631 Northeast Clackamas Street
Portland, Oregon 97208

January, 1973

Loraine B. Whittemore
Vocational Counselor
Lockhart High School
Box I20
Lockhart, Texas 78644

Julie Lanson
Consultant, Health Occupations
1035 Outer Park Drive
Springfield, Illinois 62706

University of Kentucky
Curriculum Development Center
152 Taylor Education Building
Lexington, Kentucky 40506

Carlsbad Municipal Schools
Tom Hansen
Superintendent
103 West Hagerman Street
Carlsbad, New Mexico 88220

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APPENDIX I

EXAMPLES OF PUBLISHED ARTICLES

MAJOR DISSEMINATION ACTIVITIES

NOVEMBER 29 - DECEMBER 6, 1972	A.V.A. CONVENTION (PRESENTATION/EXHIBIT)
DECEMBER 12, 1972	SOUTHERN ASSOCIATION OF SCHOOLS AND COLLEGES
FEBRUARY 6, 1973	NATIONAL ASSOCIATION OF SECONDARY PRINCIPALS
MARCH 19, 1973	ASSOCIATION OF SUPERVISION AND CURRICULUM DEVELOPMENT
APRIL 16, 1973	AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION

NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINICPALS

Dallas, Texas 1973

Tuesday, 9:30-11:30 a.m.
Room 230-231
Convention Center

PROJECT SPAN—A CAREER EDUCATION PROGRAM THAT HANDLES THE JOB

Chairman

James Marsh, Assistant Director of Vocational Education, Memphis City Schools, Memphis, Tenn.

Presenters

Robert K. Roney, Associate Professor and Director, MSU/UT Graduate Center, Memphis, Tenn.

James E. Hugueley, Director, Project SPAN, Northside HS, Memphis, Tenn.

Consultants

Zenobia V. Brooker, Principal, Burdick Vocational HS, Washington, D.C.

Fred L. Dunn, Jr., Principal, Robert E. Peary HS, Rockville, Md.

Henry H. Rosenbluth, School Management Specialist, Education Planning & Development, Bureau of Indian Affairs, Albuquerque, N.M.

ASCD
28th Annual Conference

Minneapolis Auditorium
and Convention Hall
March 17-21, 1973

76. SPAN: A CAREER EDUCATION MODEL.
Leamington, Iowa Room.

Report on the organization and implementation of three phases of a career education program, Model SPAN. *Demonstration* of a concept of the individual dignity of man as it relates to the dignity of work, seen through a narrative report.

CHAIRMAN: CHARLES ACHILLES, *University of Tennessee, Knoxville.*

STAFF:
JAMES HUGUELEY, *SPAN, Memphis, Tenn.*; JAMES D. MARSH, *Memphis City Schools, Memphis, Tenn.*

GOVERNOR'S SUB-CONFERENCE ON CAREER EDUCATION

Memphis Delta Planning and Development Region
(Counties: Fayette, Lauderdale, Shelby, Tipton)

May 2, 1973

Memphis State University - University Center

CONFERENCE PLANNING

Max Walker	Conference Chairman
C. Edwin Pearson	Program Chairman
James Hugueley	Assistant Program Chairman
Ernest Bell	Financial Chairman
Mary Collier	Melrose High School
George H. Davis	SPAN Project
Jean Hardwick	SPAN Project
Russell Smith	State Department of Education Division of Voc. Tech.
Larry Sanders	R.C.U. - State Div. of Voc. Education - Jackson
Joan Roth	N.C.J.W.
Norman G. Erwin	Shelby State Community College
Doris S. Lyons	Evaluator - U.T. - Knoxville
Linda S. Solomon	League of Women Voters
Arlene Cowles	National Council of Jewish Women
Martin E. Hamner	U.T. - College of Pharmacy

TENNESSEE PERSONNEL GUIDANCE ASSOCIATION CONVENTION

MEMPHIS, TENN. | APRIL 25, 26 & 27, 1973

III. POTPOURRI OF PROFESSIONAL IDEAS: SECONDARY AND HIGHER EDUCATION SECTION
Camelot Room

6. Start Planning Ahead Now (SPAN)
A comprehensive career-development program aimed at integrating educational experience and the world of work —Grades K-12. James Hugueley, Chairman; Mrs. Jean Hardwick.

1973
ST. LOUIS
CONVENTION
PROGRAM

AMERICAN PERSONNEL AND GUIDANCE ASSOCIATION
ST. LOUIS, MISSOURI
15-19 APRIL 1973

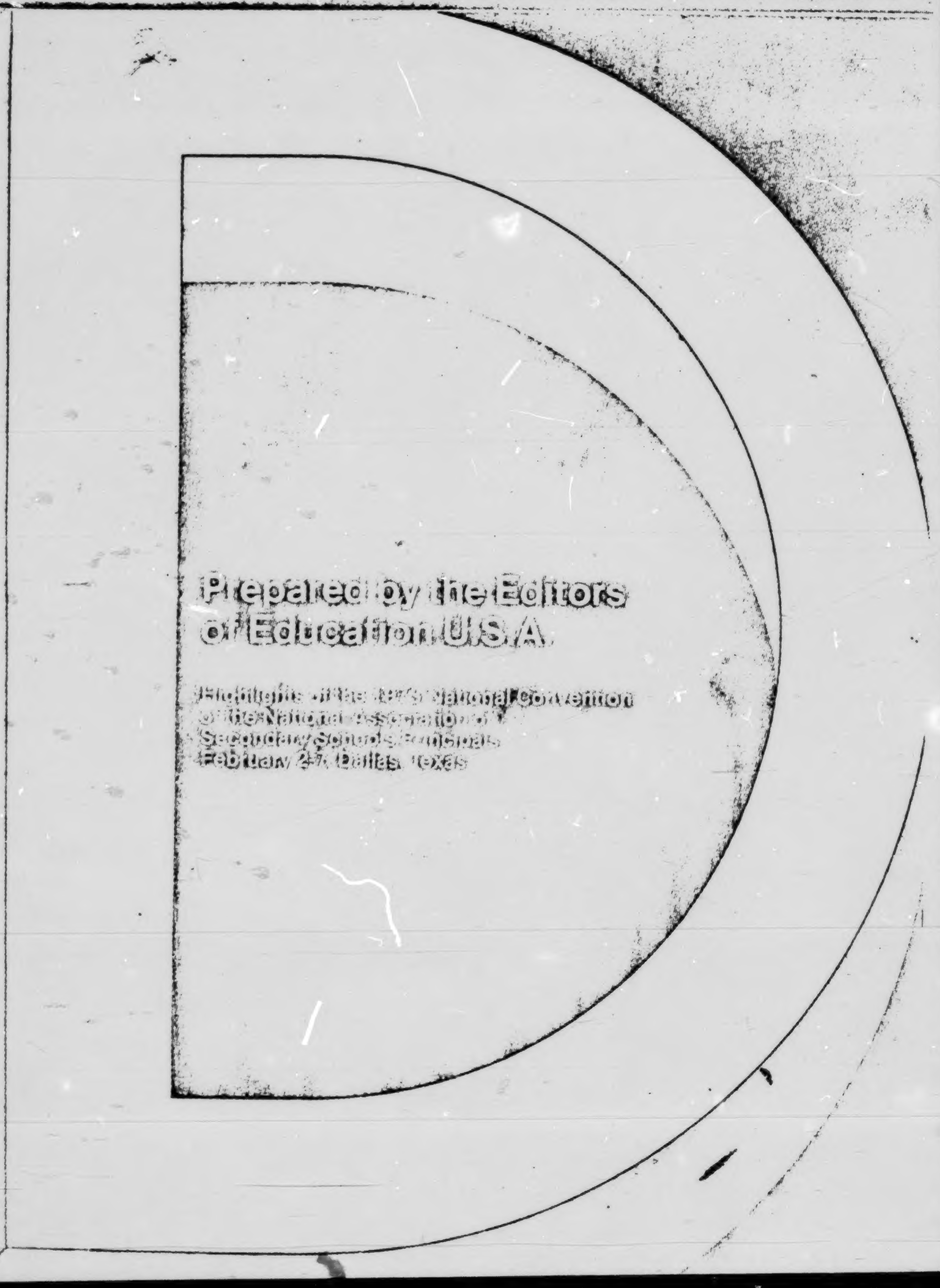
100 INVOLVEMENT, INSERVICE AND CHANGE: THE SOUNDS IN MEMPHIS

4:00 p.m.-6:30 p.m., Sheraton Jefferson Hotel, Centennial Room

Chairperson: Harold Glidden, Memphis State University, Memphis, Tn.

Presenters:
Dorothy Bradley, Memphis State University, Memphis, Tn.
Harold Glidden, Memphis State University, Memphis, Tn.
Elice R. Harris, Memphis City Schools, Memphis, Tn.
Dan Hollingsworth, Memphis City Schools, Memphis, Tn.
James Huguely, Memphis City School, Memphis, Tn.
Grace Williams, Memphis City Schools, Memphis, Tn.

Recorder: Dorothy Bradley, Memphis State University, Memphis, Tn.



Prepared by the Editors of Education U.S.A.

Highlights of the [illegible] National Convention
of the National Association of
Secondary School Principals
February 2-7, Dallas, Texas

EDUCATORS: ARCHITECTS OF CHANGE

Today's educators should be architects, designing the educational programs of the future. And their main job, according to Kent State U. president Glenn A. Olds, is to totally reorganize the nation's public school systems. In a penetrating question as the convention's keynote speaker, Olds, a philosopher, writer, and former U.S. ambassador to the United Nations Economic and Social Council, asked: "Does our effort at democratizing education really democratize?" He raised grave doubts that it does.

"Given the enormous waste and failure in a compulsory system," Olds contends, "does it square with the individual diversity, talent, and freedom of the variety of persons to educate? How does one justify the screening toward an 'educationally' elite in the process?" One example to show that today's public education suffers from an "explicit elitism," Olds said, is that little has been done to stem the dropout rate, which finds so many children from the lowest income bracket failing and leaving school.

This, Olds said, has led to the serious question of how to "justify the financing of our public schools in a democracy when the poor pay more for their relative share of the use." Under the values of a true democracy, he charged, "we have been led to think it was the other way around." And the emerging generation of today's youth, he said, will accept this reversal of priorities no longer. The young, Olds said, reject "the primacy of power as a condition of men." They reject arbitrary authority and look for evidence and logic. The young, he said, have rejected the "logic of scarcity which pits persons against each other for the good of the earth--the haves and have nots." And the young have rejected "insensitive assumptions that exploitation can be tolerated as a way of life."

The Kent State president advised that the new generations demand a search for the meaning of life, and the role of men should begin earlier in our educational systems.

CAREER EDUCATION: BRIDGING THE GAP

Career education, highlighted in a Memphis, Tenn., public school program, is successfully bridging the gap between academic and vocational education, according to its innovators. The SPAN or "Start Planning Ahead Now" program provides an all-grade-level education with career orientation, training and guidance integrated with traditional curriculum. A creative teacher in the SPAN program focuses classroom activities on concepts necessary for success in a productive society, Memphis project leader James Hugueley said.

Developing the "work concept" is further aided by drawing upon community resources and bringing them into the classroom, he said. Curriculum planners must develop programs with the goal of removing the stigma normally associated with the traditional separate vocational and general education programs, he added. Also, he said, as a student moves from elementary to secondary schools, his education is a further search and refinement of his ambitions and skills. At the same time he increases his knowledge, Hugueley concluded, he becomes aware of career opportunities.

THE EDUCATIONAL CATALYST

TENNESSEE JOURNAL
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VOL. III NO. 2
Spring 1973

A JOURNAL PUBLISHED BY DIVISIONS OF TEACHER EDUCATION
IN TENNESSEE PUBLIC INSTITUTIONS OF HIGHER LEARNING

JUL 17 1973
[illegible] CITY SCHOOLS

BEST COPY AVAILABLE

PROJECT SPAN: A CAREER EDUCATION MODEL EXEMPLIFYING LOCAL SCHOOL – HIGHER EDUCATION COOPERATION

Robert K. Roney, Charles M. Achilles, Douglas Norman,
James D. Marsh, and James Hugueley

Career education is emerging as an important new emphasis in American schools, and, as the movement gains momentum, the resources of colleges and universities seem certain to be called upon by public school systems. Pertinent questions that must be answered include "What is career education?" and "How can higher education and local schools cooperate to get the full potential from the career education concept?" In an attempt to answer these questions, some basic points about career education are reviewed, an exemplary career education project in its third year of operation in Memphis is described, some ways that higher education and the local school district have cooperated on the project are detailed, and some consideration is given to ways in which higher education can encourage career education.

Career Education: The Setting

Career education is one of the latest approaches to reform in American education. Sidney P. Marland, Jr., formerly U.S. Commissioner of Education and now Assistant Secretary for Education of the U.S. Department of Health, Education, and Welfare, has been a national leader in the promotion of career education. Although some pilot programs can be traced to the Vocational Education Amendments of 1968, the term itself recently "has come into educational parlance with abruptness."[1] Commissioner Marland was quoted in 1971 as terming career education "a new frontier."[2] One of his associates in the U.S. Office of Education described career education as

> a bold new design for education that will effect a blend of academic, general and work skills learning so that individuals passing through the system will be ready for economic self sufficiency, for a personally satisfying life, for a new learning experience appropriate to career development and a vocational interest.[3]

Robert K. Roney is Director, University of Tennessee – Memphis State University Graduate Center, Memphis; Charles M. Achilles is Associate Professor of Educational Administration and Supervision and Coordinator of Field Services, Bureau of Educational Research and Services, The University of Tennessee at Knoxville; Douglas Norman is Director, Upper Cumberland Reading Project, Baxter, Tennessee; James D. Marsh is Assistant Director, Division of Vocational Education, Memphis City Schools; James Hugueley is Director, Project SPAN, Memphis City Schools.

Career education is sometimes mistakenly assumed to be vocational education. It should be viewed as a focus encompassing the spectrum of educational experiences. In 1971, the National Association of State Directors of Vocational Education adopted a position paper on career education which stated, in part:

> 1. Career education is not synonymous with vocational education, but vocational education is a major part of career education.
> 2. Career education involves all students and all educators.
> 3. Career education involves extensive orientation and exploration of occupational opportunities.
> 4. Career education is a continuum that begins at kindergarten and extends through employment.
> 5. Career education includes specific preparation for occupations.
> 6. Career education assures realistic occupational choices.
> 7. Career education promotes wholesome attitudes toward all useful work.
> 8. Career education permits each student to assess realistically personal attributes as a part of setting life's goals.[4]

Career education, if properly designed, should result in job entry skills for high school graduates and dropouts, technical skills for all graduates of two-year colleges and technical institutes, and career skills for all college graduates. Through the vehicle of career education schools will be made meaningful for students, particularly in a career sense. Schools will establish placement services that will actually get young people into jobs, and new approaches to career education will be installed.[5] Career education is a kindergarten through college program basically intended to (1) familiarize youngsters with basic information in the primary grades, (2) help them get exposure to real work situations in the middle years, and (3) prepare them in senior high school to enter their chosen field with a marketable skill at graduation or sooner to enter a technical or professional training at the college level.[6]

Although some observers contend that career education is a totally new movement, its major antecedents can be traced to vocational education and guidance.

> The term "career education" represents a synthesis and blend of many concepts and elements available at some point and in some place in American education. However, the intent and the implementation tactics so far apparent are to bring these concepts and elements into a new and systematic interrelationship among vocational education, vocational guidance, career development and other elements of the educational and community networks of which they are a part.[7]

Career education usually is considered to have three distinct components, one each for the elementary, junior high and high school grades, and to have three generally accepted options for exit from the program.

> For elementary and secondary education, the program includes a structuring of basic subjects, grades 1-12, around the theme of career opportunities and requirements in the world of work. In elementary school, students are informed about the wide range of jobs in our society and the roles and requirements involved for employment. In junior high school, students explore several specific clusters of occupations through hands-on (psychomotor) experiences as well as through classroom instruction. At the senior high school level students pursue their selected occupational areas, exercising one of three options: (1) intensive job preparation for entry into the world of work immediately upon leaving high school, (2) preparation for post-secondary occupational education in a technical school or formal apprenticeship program, or (3) preparation for a four-year college or university.[8]

Project SPAN, A Career Education Model in Memphis

Start Planning Ahead Now to SPAN the gap between school and work is the theme of an exemplary career education project of the Memphis City Schools which has been funded under Part D of Public Law 90-576 of the Vocational Education Amendments of 1968. Project SPAN operates in a cluster of schools encompassing approximately 11.5 per cent of the total population of the Memphis Public Schools.[9]

Instead of adding to existing curricula, career education, as presently constituted in Project SPAN, involves the restructuring of those curricula. For example, teachers in elementary, middle and high school grades are encouraged to incorporate materials about careers into such traditional courses as mathematics, art, social studies, and English.

Elementary school teachers write units of study relating their regular course work to fifteen broad career fields or clusters, each of which has five levels of jobs ranging from the highly skilled to the semi-skilled or unskilled. A well-designed study unit to carry out a fusion of existing curricula with career education concepts can earn a teacher twenty-five dollars if it is accepted for inclusion in one of SPAN's many curriculum handbooks. High school teachers are assisted in developing units to relate their subjects to student career interests and to the world of work. For example, information about how to complete a job application form and take part in a job interview may be integrated into the English curriculum. In each case, the teacher is challenged to find a career-oriented vehicle to convey the basic objectives for that specific discipline to the student. Through this process, career education is not "added on" to a program; it becomes a unifying focus for basic instruction.

Special resource persons are provided by Project SPAN at different grade levels. In elementary school, resource persons help teachers develop units and plan and conduct "hands-on" (psychomotor) activities in which youngsters may make simple objects or do simple tasks associated with various career fields. Typical activities are making wooden scrapbook covers, laying brick, cooking, and operating office machines. In the middle and high school grades, SPAN personnel serve in a placement and counseling capacity. They may teach special cooperative education classes, help students find part-time jobs during the school year or identify full-time jobs after graduation. Other students are advised in selecting appropriate post-secondary training in vocational schools, community colleges, or technical institutes. SPAN staff also collect, store and deliver information about career fields and specific job opportunities for students.

In Project SPAN, the last-mentioned task above is done through Project INFOE (Information Needed for Occupational Entry)[10] and CACI (Computer Assisted Career Information),[11] both of which rely on localized information about specific job opportunities. Project INFOE utilizes microfiche to reproduce job abstracts, whereas CACI is a computerized system that provides students with personalized printouts giving local job information. The latter system also gives high school counselors a list of students who have requested job information, the fields in which they are interested, and a source of placement information to be used in working with employers who have openings for students or graduates.

Another role for educational technology in the project is the orientation of elementary school pupils to different career clusters through a series of fifteen-minute television programs produced by the project in cooperation with Memphis' public television station, WKNO. Each of the ten programs is telecast three times during a year, and filmed copies (kinescopes) of the video-taped programs are available for follow-up showing in schools using regular 16 millimeter sound motion picture projectors.

Career education as conceptualized and practiced in Project SPAN cuts across a number of academic fields and may become a future challenge to institutions of higher education preparing elementary and secondary teachers, counselors, media and vocational education specialists, and educational administrators. The latter group, for example, may be called on to help develop, implement, and evaluate career education programs in their schools or districts. Since career education is a relatively new concept, many school systems will turn to faculties of colleges and universities for assistance.

What is the Role of Higher Education in Local School Career Education Programs?

Actual examples of higher education-local school cooperation in Project SPAN are abundant. Locally, a close consultant-local system relationship has developed that extends beyond the usual preservice and inservice activities. The Tennessee Research Coordinating Unit (RCU) at The University of Tennessee provides technical assistance, evaluation instruments, access to the ERIC system, and a point of entry to the National Vocational Technical Centers and other projects. Project INFOE, an integral component of SPAN, was refined for Tennessee at the research unit. Personnel from Memphis State University have directed and coordinated retreats and workshops for SPAN-related personnel. Higher education personnel, drawing upon local system resources, have coordinated external evaluation efforts for Project SPAN, given direction in developing a dissemination strategy, and assisted SPAN personnel in telling the SPAN story at several major conferences.

In addition to the specific areas in which Project SPAN provides assistance, there are a number of general areas in which higher education can help with the career education program thrust in local schools. This assistance could take several forms, among them the following:

1. Aid to local schools in the development of career education programs. This assistance would include a review of research literature, development of a specialized program design for the local school, and service in the critique of the program during the developmental stages.
2. Aid to local school systems provided through service bureaus and the public service efforts of various departments to discover and secure any special funds which may become available.
3. Dissemination of information and materials generated by pilot projects such as SPAN. Since colleges and universities probably will be called upon for consultative help in planning career education programs, they can perform a valuable service to the program by collecting materials from pilot projects and disseminating them to other interested school systems and by acquainting the system with sources of information on career education such as ERIC.
4. Assistance to school systems with overall program planning, including the formulation of program goals and objectives and the design and conduct of evaluation activities. If career education is not to become just another educational fad, it will require careful planning, with adequate evaluation and documentation of results.
5. Encouragement of cooperation between academic fields which will be necessary if career education is to serve as the catalyst for reform presently envisioned by Secretary Marland and others. Cooperation by various college and university departments now found in training programs for counselors, teachers, administrators and specialists in general and vocational education is needed for the career education program.
6. Provision through industrial arts or technology departments for assistance with "hands-on" activities for non-vocational education teachers.
7. Utilization of new sources of assistance, such as university job placement offices, to advise high schools wishing to offer similar services.

Higher education can also play a "devil's advocate" role. Before local schools run headlong into career education (the bandwagon effect), higher education personnel can help clarify basic philosophic and methodological problems. How can the best elements of the "humanizing education" movement be secured in career education? How does career education keep from becoming too focused on economic man and jobs to the exclusion of other human needs and concerns? Higher education needs to help clarify and examine career education as a process as well as to encourage it as an innovation.

Career education is a new direction in education, so much so that the term may be more familiar to many educators than the concepts behind it.[12] Even though career education has its roots in existing programs, higher education will be called on for extensive assistance and may play a major role in the evolution of the movement. One way that this can be accomplished is for professors of educational administration and other disciplines to familiarize themselves with the pilot projects already in operation and for universities to become, in effect, unofficial clearinghouses for information, materials, and evaluation reports growing out of these projects. This assistance to school systems will allow the systems to take advantage of the successes of pioneering projects, avoid their mistakes, and shorten the developmental time of new programs.

FOOTNOTES

[1] Edwin L. Herr, *Review and Synthesis of Foundation for Career Education* (Columbus, Ohio: ERIC Clearinghouse on Vocational and Technical Education, 1972), p. 3.

[2] Ibid.

[3] *Ibid.*, p. 4.

[4] *Ibid.*, p. 5.

[5] Sidney P. Marland, "Career Education Now," *The Bulletin of the National Association of Secondary School Principals*, LV (May, 1971), 1-11.

[6] Herr, p. 4.

[7] *Ibid.*, p. 3.

[8] Howard Conley, "Career Education in Rural Schools," *ERIC/CRESS Newsletter* (Fall, 1972), p. 1.

[9] Robert K. Roney, *et. al.*, *Evaluation Report, 1971-72*, Contract No. OEC-0-70-5181, Part D, Public Law 90-576 (Knoxville, Tennessee: Bureau of Educational Research and Services, University of Tennessee, August, 1972), pp. 1-2.

[10] Counselor's Guide to INFOE (Knoxville, Tennessee: Tennessee Research Coordinating Unit, College of Education, The University of Tennessee. (Mimeographed.)

[11] James E. Hugueley, "Quarterly Report, Project No. 0-361-0115 (Memphis: Memphis City Schools, Division of Vocational Education, June 30, 1972), pp. 4, 44-46. (Mimeographed.)

[12] For a discussion of possible problems in career education, see R. J. Nash and R. M. Agne, "Career Education: Earning a Living or Living a Life?" *Phi Delta Kappan*, LIV (February, 1973), 373-78.

NEW ENGLISH: TESTING THE WATER

Harold Davenport

Teachers who do not wish to become totally immersed in the new linguistics-based English now being introduced in many Tennessee school systems might find it profitable to wade in up to their ankles in specific areas that could easily be integrated into a traditional English program. There are feasible applications of the new English to traditional English in the areas of parts of speech, spelling, and vocabulary development.

In the view of linguists who are called structural grammarians, parts of speech are learned in very early childhood in terms of characteristics called *markers* and context positions called *slots*. For example, the words *my* and *the* invariably signal that a noun is to follow and are said to be *noun markers*. In early elementary grades it would be well to teach the noun simply as a word that comes after *the* or *my*. A class may be given the noun marker *the*, for example, and students asked to give a word that comes after *the*. An oral response *only* should be made to begin with, followed by oral responses that must be written down. Any child who can speak intelligently will invariably respond without error on such a test. On the axiom that success at one level is fundamental to learning at a higher level, the child will then be prepared to move successfully against further, more complicated work with the noun. High school students of low academic ability who cannot handle more complicated work in grammar can at least master basic grammatical terminology by the use of such devices as the noun marker. Noun markers in addition to *the* and *my* include articles, demonstratives, possessives, and quantity words like *some*, *few*, and *many*.

Noun markers also include endings characteristic of nouns such as *-ion*, *-ment*, *-ity*, *-ance/-ence*, and the like. Students may be given a word or two with an *-ion* ending, such as *action* or *section*, and individual students asked to give as many words as they can think of with the *-ion* ending. The teacher and students should use the words in a meaningful context. An activity of this kind following the use of the noun markers will reinforce the noun concept and can also help in teaching syllabication of words and in vocabulary development.

Other parts of speech can be learned similarly. Adverbs always fill the slot in the following test pattern:

It was done ____________________.

Student responses will indicate that prepositional phrases and individual

Harold Davenport is Assistant Professor of Education, Department of Education, Middle Tennessee State University.

'Start Planning Ahead Now'

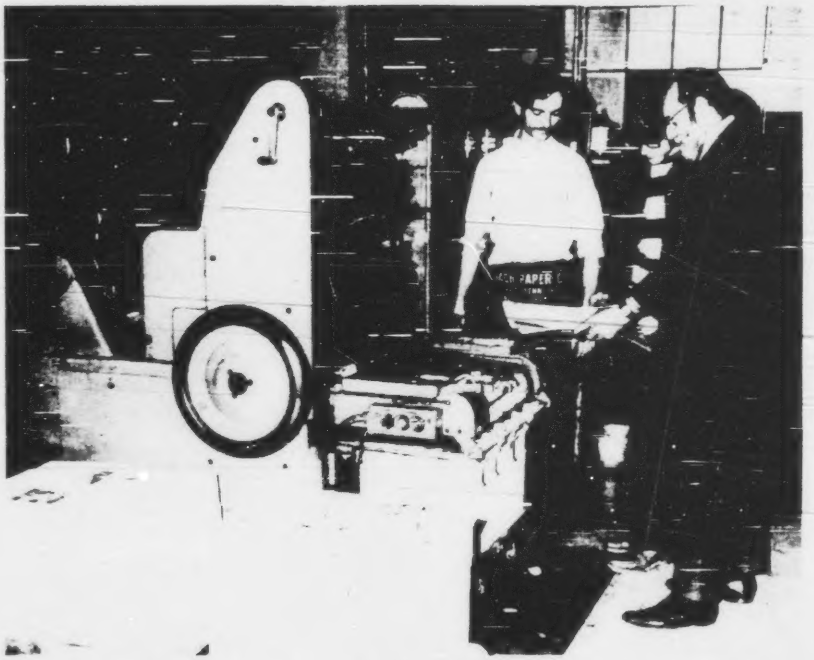
Memphis SPANs the Gap

By James D. Marsh and James Hugueley

AN INNOVATIVE career education program is in its third year of operation in the Memphis, (Tenn.), City Schools. Preliminary evaluation results from the first two years of operation indicate that student understanding of industrial and technical occupations can be improved.

The project, funded through Part D of the Vocational Education Amendments of 1968 (P.L.90-576), combines elements of industrial arts, home economics, vocational education, general education, and guidance to provide career education for elementary and secondary pupils.

SPAN encourages young people to "Start Planning Ahead Now." It also represents a bridge spanning the gap between school and work, relating academic study to job reality. The project seeks to assist students who are lacking in job skills or knowledge. Enrolment in the 20 target schools served by the project in 1971-72 was approximately 16,500, or 11.5 percent of the enrolment for the entire Memphis City system. SPAN includes three components: elementary, middle, and high school.



Students take mini-courses. Above, the instructor and a student watch a journeyman printer demonstrate the operation of an offset press in a community based printing plant.

Short TV Programs

The elementary-school component is designed to provide basic occupational exploration and to stress positive personal attitudes toward work. A major source of career information developed by the project is a series of 10 short television programs which were broadcast to the public schools by Station WKNO, Memphis' public TV outlet. Each 15-minute program covers a broad occupational field (occupational cluster) and is keyed to a printed occupational orientation guide developed by SPAN for use by elementary pupils. The TV programs also are available in kinescopes (film copies) for classroom showing on 16mm projectors.

The printed guides typically contain suggestions to teachers for units of study built around the television series, pupil learning experiences relating the TV programs to curriculum content areas, and instructions to aid children in making elementary projects in "hands-on" activities.

In the middle grades (6-9), students begin to explore specific vocations, with emphasis on the training needed for each. Work-study programs, developed and operated in cooperation with Memphis businesses and industries, are available. Overage students thought to be dropout

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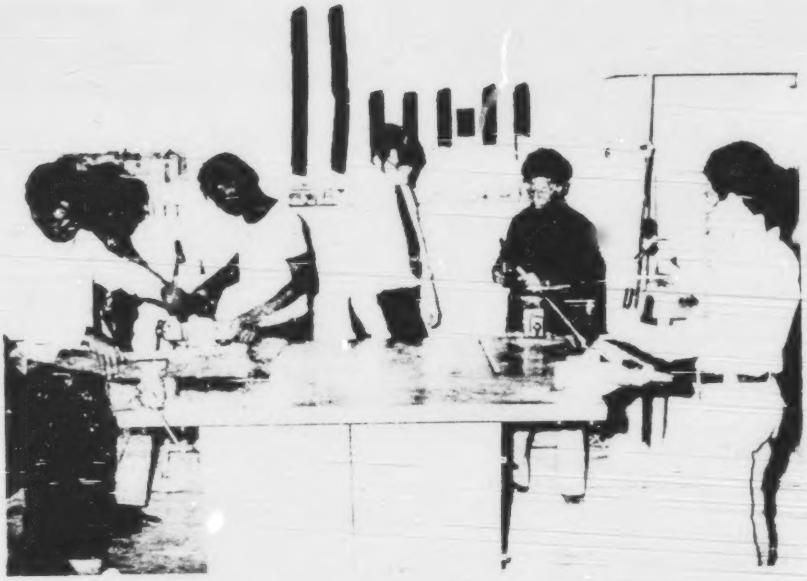
James D. Marsh is Assistant Director, Vocational Education, and James Hugueley is Director, SPAN Project, both of the Memphis City Schools, Tennessee. This article was written in corroboration with Dr. C.M. Achilles, Dr. R.K. Roney, and Dr. Douglass Norman, evaluators for SPAN.



Mass production in operation at Airways Junior High School, Memphis. A "salvage company" converts surplus brooms into bench brushes which are marketed as company product.

candidates are given special attention in general co-op courses stressing personal and attitudinal development needed for successful job entry and advancement.

More Complex Service

As students progress into high school and near the time they will leave the classroom for full-time work, or for postsecondary training SPAN's services to them become more complex. These services include: 1) job orientation classes, 2) mini-courses emphasizing needed skills for seniors about to take specific jobs, 3) work experiences (co-op) during school hours—with SPAN personnel helping place students in jobs and supervising their training and performance, 4) summer programs for those not enrolled in other postsecondary training, 5) steering students to a variety of vocational information sources, and 6) job placement services.

Vocational guidance materials developed for junior- and senior-high school students include occupational information packets which school counselors use in working with students, and computerized job information services. These materials, developed by SPAN personnel, are presently disseminated systemwide.

Students in the middle grades begin to explore specific occupational needs in the industrial-arts and home economics programs. SPAN ideas are implemented in the following manner: In the junior-high industrial-arts program, time is set aside during the semester to present major career education concepts:

—Orientation to the world of work.
—Understanding self and others.
—Pretraining for a chosen vocation.

Generalizations and assumptions which serve as the developmental starting points for these units are set forth below in some detail in the hope that they might help other educators develop similar programs.

An Orientation to the World of Work

1) In the working world of a democratic society, each worker makes a vital contribution.
2) Knowledge of available job opportunities tends to help individuals plan for the achievement of goals.
3) Socio-economic and technical developments are continuing to require more skillfully trained people.
4) High-school and post high-school vocational training offer preparation for a wide range of occupations.

Understanding Self and Others

1) As a person improves his personal qualifications and acquires skills, his opportunities for employment tend to increase.
2) Both employers and employes make contributions to the job which can result in mutual satisfaction and effective job performance.
3) When one has an accurate self-concept, he/she has a sound basis for making himself employable.
4) Continuous educational and vocational plans enable one to take advantage of educational and other opportunities for increasing employability.

Industrial Arts: Pretraining For a Chosen Field

1) One's satisfaction in the choice of a vocation is influenced by one's understanding of related occupations.
2) Occupations differ in the educational and personal qualifications they require for successful performance.
3) There are socially acceptable jobs in trades and industry for people with a wide range of interests and capabilities.

Learning strategies in the form of concepts, activities experiences, and resources are outlined in *Occupational Orientation and Exploration in Junior High School*, a publication produced locally by Project SPAN personnel. Eighteen performance objectives, which are measured during the evaluation phase of the total career education unit, guide the student during the learning experience. Some of the activities include brainstorming, classifying occupations, reviewing help-wanted ads, mass-production of projects, occupational research, career audiovisual presentations, field trips, talking with resource people, and final evaluation.

For example, an inquiry into a series of career galaxies takes on the aura of a manufacturing company. Here the students begin with a statement of need: For example, to design and market a note pad that uses available paper; is handy, compact, well designed; has a pleasing texture; has a known cost ceiling per unit. The problems to solve identify themselves with the research, design, planning, manufacturing, and merchandising occupations within a company. This teacher-managed learning experience involves the class unit in organizing the basic company and its officers, and in brainstorming the availability and cost of materials and the occupations related to each material. Once materials availability is known, the design phases of the problem allow students to explore the "engineering" section and graphic representation occupations.

When students become involved in actual mass-production, they explore assembly line, logistic, and quality control occupations. The organization of a personnel system not only lets them observe the whole organization and their role in it, it also lets them explore various clerical, personnel department, managerial, and accounting occupations. Merchandising of the product exposes the student to the role of a salesman.

The final function of company officers and the accounting occupations are investigated as students determine their final profit and loss. Evaluation of the career portion of the mass-production unit includes students' listing, classifying, and describing the occupations they were exposed to during the experiences.

Quickshot Programs

The high schools served by Project SPAN are comprehensive in structure. For those students taking vocational-education subjects the training usually starts in the 10th grade. Approximately 40 percent of the student body is involved in some phase of vocational education: technical and industrial, distributive, vocational-occupational, occupational home-economics, or health occupations (35 class units). With 23 percent going on to post-high-school education, the remaining 37 percent of the senior students are involved in various quickshot or mini-programs equipping them with goal-entry employment attitudes upon graduation. This curriculum covers job attitudes, occupational responsibility, how to be interviewed, and how to fill out an application form.

Also, skill mini-courses are available to seniors on an individual basis during free periods, after school, or during the summer sessions. These courses are designed for specific employment needs; i.e., use of hand tool concepts, framing and forming if to be employed in the building trades; service station operation if to be employed in such; waiter waitress training, etc.

The SPAN job placement counselor, in cooperation with the target schools' regular guidance personnel, are responsible for the success in placing students into the world of work or in postsecondary education. The SPAN placement counselors assist students in locating job openings and follow-up on students after placement.

Students learn machinist trade after developing awareness in industrial arts experiences

Placement follow-up data for the 1971-72 graduating seniors indicate the following percentage distribution:

2.3—Apprentice Programs
4.6—Adult Education Programs
4.6—Military
41.3—Full-time Jobs
14.7—Entered Vocational-Technical School or Technical Institute
23.5—Entered 4-year University
9.0—Unaccounted

Hints for Implementing

Experience from the SPAN program suggests the following implications for administrators and industrial-education teachers considering a career program in their school:

1) Support from and leadership by the central office staff and the principal are vital to the successful implementation of career education programs.
2) Principals should try to insure that career education becomes an integral part of all phases of their school's curriculums, not something which is added on, and not just another alternative for students who cannot handle college preparatory courses.
3) One way to insure against career education becoming an add-on is for teachers to interweave career education concepts with basic tenets of each discipline. Industrial-arts and trade and industrial teachers can take the lead in giving assistance to their academic counterparts in this difficult task.
4) Industrial-education teachers, normally occupationally oriented, should realize that an adequate time period must be allowed for implementation of a career education program within a school or school system.
5) Community involvement is necessary for a successful career education program. The community provides a ready supply of resource persons from different career fields, and a laboratory where students can explore these fields.
6) Intensive and in-depth in-service assistance must be provided teachers planning to implement career education. Industrial-education teachers have to accept leadership roles in this activity as they are sometimes the only persons knowledgeable of industrial occupational openings.

The SPAN project has found that career education does provide an opportunity to involve teachers of traditional content courses, those of industrial-arts and vocational-education classes, and guidance personnel in cooperative ventures, with the common objective of students' understanding of themselves and their goals in life.

Student employability after a successful training experience is the ultimate goal of the program.

Industrial-education teachers must become a part of this cooperative venture if this is to be achieved. They should remember that their efforts in the career education vehicle might well be analogous to lead-free gasoline in the fuel tank of an automobile; it keeps the car going and it doesn't pollute.

Ohio Board Backs Vo-Ed

The Ohio Board of Education has urged a goal of 40 percent of 11th and 12th graders trained in a job skill.

Vol. 16
No. 6

Memphis City Schools *February 1, 1973*

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Project SPAN Continues To Grow

Career Awareness (K-6)

The SPAN PROJECT, an exemplary project in career education funded by the U. S. Office of Education, has selected three model elementary schools. Teachers in these schools, with the full-time assistance of a professional career education resource teacher from SPAN, are developing units in career awareness to be integrated into the existing curriculum at these grade levels.

The Project has also developed an Instructional Television Series of ten films which covers one career cluster per month. It is televised at three intervals during the month and the elementary teachers at grades 4-6 can receive it in their classrooms via television. A teacher packet of 300 pages has been developed by various advisory committees for use by these teachers and it contains puzzles, games, and many varied methods of integrating the career awareness into the elementary subjects. It also contains the directions for performing at least four "hands-on" projects that relate to the cluster covered that month.

Career Exploration (7-9)

Teachers at this junior high level are developing units in career exploration to be integrated into their subject matter disciplines. The SPAN Curriculum Specialist has developed a work-text for use in grades 8 and 9. A microfiche aperture card approach to localized career information has been adopted. This system is implemented by use of a microfiche reader located in each of our junior high schools. Copies of the four page abstract on each career are available from the SPAN headquarters office for those students who desire a hard copy of the INFOE for their own use.

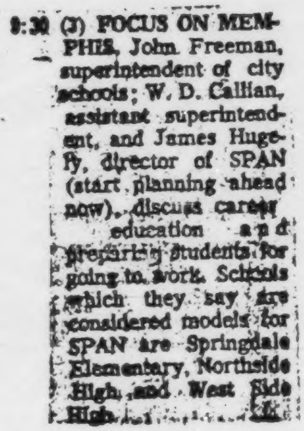
The Project has also established a computerized career information system (CACI) that is available to all students from grades 7-12. This is available to approximately 80,000 students in the Memphis City Schools. The approach is a mark-sense card sent to the computer division.

Also established is a General Cooperative Education class for students who have reached the minimum age of sixteen and are in junior high school. Part-time positions in the "world of work" are located for these students and they are released from school in the early afternoon to report to work. They also receive school credit for the classroom and on-the-job work experience.

Career Focus (10-12)

The teacher developed unit is continued and school counselors and SPAN career placement coordinators assist the students in obtaining paid part-time employment in their career interest area. Emphasis is placed on securing 100 percent placement of all graduating seniors. Placement includes full-time work, college baccalaureate program, vocational or trade school, associate degree in a junior college or technical institute.

MEMPHIS PRESS-SCIMITAR, SATURDAY, FEBRUARY 17, 1973



9:30 (3) **FOCUS ON MEMPHIS**, John Freeman, superintendent of city schools; W. D. Callian, assistant superintendent, and James Hugefy, director of SPAN (start planning ahead now), discuss career education and preparing students for going to work. Schools which they say are considered models for SPAN are Springdale Elementary, Northside High, and West Side High.

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TENNESSEE

VO-TECH NEWS

Vol. 7 No. 1 Nashville, Tennessee October, 19

NEWS FROM HERE AND THERE

SPAN

An Accelerated Project for a Systems Program Approaching Non-Unemployment of Vocational Students

DESCRIPTION OF PROGRAM:

I. Administrative Structure

Director of Vocational Education and his supervisory staff in the Memphis City Schools heads total program, assisted by project coordinator. Staff includes: curriculum specialist, job development coordinator, teacher aides, and target area school principal, cooperative coordinators, and teachers.

II. Program Design

The elementary level program provides laboratory experiences in occupational skills, films on ITV, and educational inserts. The middle school will integrate an occupational guidance series into the industrial arts and home economics programs. The high school level will utilize a Vocational Guidance and Job Development Center located at the target area high school, a cooperative program, a basic skill program during the summer or after school, and programs for dropouts. A computer system will be set up for job placement and follow-up the second and third year.

One high school will be used as the target area, and students from 2 junior high schools will be involved. Fourteen elementary schools will receive materials and assistance from the center. All Memphis 5th and 6th grades will take part on a voluntary basis; 13% of the total student population will participate.

III. Program Components

A. Occupational Orientation—This is provided in the elementary and middle school programs, which include occupational elements in films and lab experiences for K through 6 and educational inserts in industrial arts and home economics courses in grades 7 through 9.

B. Cooperative Education—work experience will be provided from 12th grade students. Second or third year vocational enrollees and non-vocational students will participate in cooperative education after taking a summer or after school program of skill orientation. Coordination will be handled through the job developer and co-op coordinators in the center.

C. Intensive Job Entry Skill Training—A program will be developed through the center to train high school students in quick "shot" programs. This will be included with the cooperative program for non-vocational students.

D. Occupational Guidance, Counseling and Placement The program basically provides occupational guidance information and techniques, K through 14. The main guidance and placement efforts are handled through the information and placement center for high school students.

IV. Unique Features

A. Utilization of educational television for the delivery of vocational orientation programs.

B. Development of a computer system approach to job placement.

C. Redirection of industrial arts and home economics to occupational orientation.

D. Quick "shot" occupational skills program for potential dropouts leading to employment.

MEMPHIS COMMERCIAL APPEAL - November 20, 1972

Career Education Fills A Need

By ART GILLIAM

MUCH GREATER emphasis is placed on higher education in this country than in most others around the world. Ideally, everyone could attend college. But the fact is that many students finishing high school either cannot or will not seek further formal education.

Recognizing the needs of those students, programs which emphasize preparation for jobs after high school have been implemented at some local high schools.

JOTHER LOCKE, the job placement coordinator at Northside, explains the program at Northside, Melrose and Westside. "There is a lot of automation in industry," he says, "and those seeking a job need training. We try to give them total training in high school so they may receive a job after graduation.

"Our students are able to see, through their training, what the job consists of. They get to see this as far back as elementary school, and in this way they can be headed in the right direction when they reach their senior year."

How do the rewards of college training compare with training aimed at a specific vocation after high school? "To receive top pay, a student would need at least two or three years of college," Mr. Locke says. "However, in a specific field such as electronics the high school graduate can immediately earn $3 or $4 an hour. We simply try to utilize the working world, and many of our students are more successful this way."

JOHN DAVIS is in the SPAN (Start Planning Ahead Now) office at Northside. SPAN works to expose all students to different jobs, including those students interested in career education.

"The benefits of career education lie in actual job experience," Mr. Davis says. "The students are exposed and oriented to what is actually available in the working world.

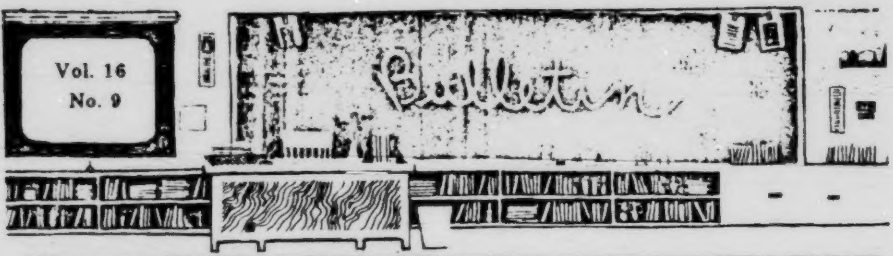
"In a comprehensive school which offers both academic and career training, the student has a more realistic choice. SPAN can work with the student who is interested in an apprenticeship or we can expose the academically oriented student to the job situation he is interested in."

THE JOB placement coordinator at Melrose, Marshall Marcus, says, "All education is career education. Our program simply prepares the student to make this competitive entry; that is, to go to work."

Regarding the differences between college and an immediate career after high school, he says, "A person could go to college and not make it, or he could go to college and still have trouble getting a job. In a program like this, he can go through a local apprenticeship and step into a job getting a top salary. But the student should have full information about both college and a possible immediate career. The final answer lies with him and his family."

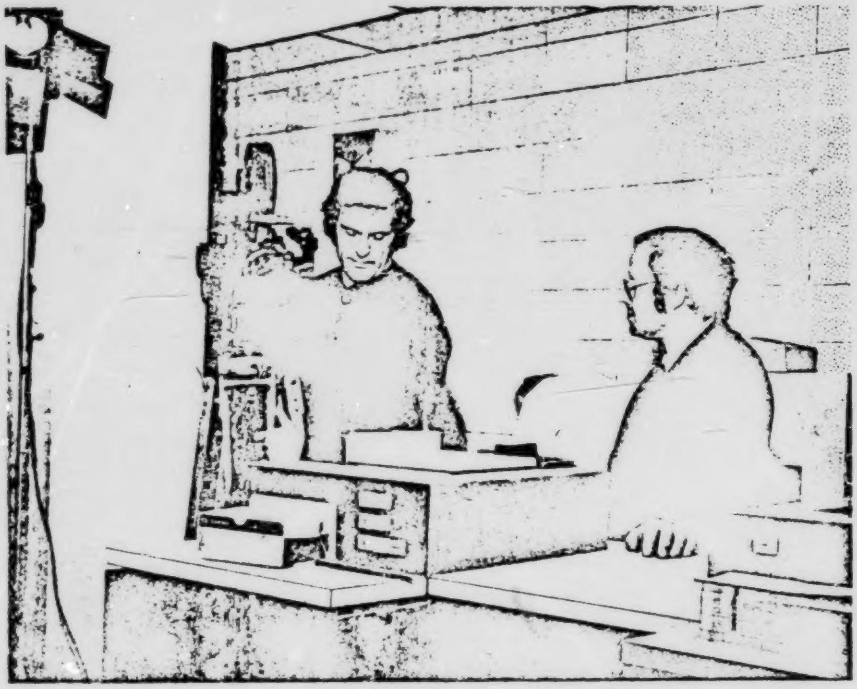
EVERY FAMILY which has children willing to go to college and which can afford, even with a maximum of sacrifice, to send them should do so. Career education is no substitute for college training.

On the other hand, some students simply cannot or should not be encouraged to seek further formal training. For them, career education provides a skill which can be sold on the labor market. To get it in proper perspective, career education is very worthwhile and should be supported by local business and industry. It is the next best thing to college.



Vol. 16
No. 9

Memphis City Schools *May 1, 1973*



MEMPHIS SCHOOLS PART OF WEST GERMAN DOCUMENTARY— Dr. Claus Katz (right), Director of West German Television, recently filmed a segment of a documentary on American education in the computer center. The documentary will cover all facets of American education with Memphis representing the career education segment.

Career Awareness Institute Formed

Great emphasis has been placed on the need for career education at the secondary level and in response to this emphasis the Memphis City School system is piloting a Career Awareness Institute in cooperation with State Technical Institute of Memphis. The CAI will begin on July 9 and conclude August 3, 1973.

This is a non-credit tuition free course for participating secondary students. Free transportation will be furnished from designated pick up points to and from State Tech. If the program is federally funded, free lunches will be furnished to all participants. If federal funds are not received, lunches will not be served.

The Institute's purpose will be to acquaint secondary students with career opportunities available through post secondary two year institutions like State Technical Institute in Memphis.

Students who have completed their junior year in high school will be eligible to participate in the Career Awareness Institute. These students will be selected by guidance counselors using specific guidelines in their selections.

career education news

Volume II, Number 7
April 15, 1973

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In Memphis, Tenn., CE officials enlisted the aid of the local educational television station in producing 10 career orientation programs aimed at elementary school pupils.

Each 15-minute program acquaints children in Grades 5 and 6 with a major career cluster. Teachers' curriculum guides contain exercises linking each cluster with related content area courses such as language arts, mathematics and science. In addition, a number of preview games and exercises, plus simple objects to make during follow-up "hands on" activities, are described in the 300-page teacher guide book.

Although the programs feature local settings, the film series is appropriate for any school system, according to James E. Hugueley, Director of Project SPAN (Start Planning Ahead Now), the exemplary CE project funded by the U.S. Office of Education, that coproduced the series with Station WKNO. Scripts were prepared by WKNO's director of instructional TV and an elementary curriculum specialist, under the guidance of advisory groups of parents, teachers, students and business people. The 10 films include: an introduction to careers, construction, business and office, communications and media, health, manufacturing and industry, transportation, personal and public service, consumer and homemaking, marketing and distribution. Films are shown three times a month over TV during school hours. Teachers can also order 16mm versions for use anytime in the classroom.

WRITE FOR a copy of the 300-page teacher's guide, $5; copies of the 15-minute films in 16mm version, $40 each; a teacher preparation workshop guide, free, to: James E. Hugueley, SPAN Project Director, Northside High School, 1212 Vollintine Ave., Memphis, Tenn. 38107.

APPENDIX J

THIRD PARTY EVALUATION

NOTE: This evaluation and Appendix J can be found in Volume II of this report.

EVALUATION REPORT, 1972-73

Project No. 0-361-0115; Contract No. OEC-0-70-5181

SPAN: An Accelerated Project for a Systems Program Approaching non-Unemployment of Vocational Students

Exemplary Project in Vocational
Education Conducted Under Part D
of Public Law 90-576

† † †

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I. INTRODUCTION: PROJECT SPAN* AND ITS EVALUATION

Project SPAN was an exemplary project in vocational education funded under Part D of the Vocational Education Amendments of 1968 (PL 90-576) during the first round of program fundings for Exemplary Project in 1970. It was selected in national competition. Funds for this Project, unlike part of the funds for exemplary projects, came directly from the U. S. Office of Education (USOE) to the Vocational and Technical Education Division of the Memphis City Schools. (Under the Exemplary Project funding pattern, each state in the first round of funding could have one project supported directly from the USOE and one or more projects funded by the State's Division of Vocational and Technical Education.)

The SPAN Project was developed by personnel of the Memphis City Schools as an exemplary career education project designed to serve grades K through 12. The project embodied the basic career education stages as exemplified and espoused in literature and theory: a component at the elementary grades; a component for middle school or junior high school aged students; and a component to service the senior high school students. These basic components are described in the following passage:

> For elementary and secondary education, the program includes a structuring of basic subjects, grades 1-12, around the theme of career opportunities and requirements in the world of work. In elementary school, students are informed about the wide range of jobs in our society and the roles and requirements

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*The original title, "An Accelerated Project for a Systems Program Approaching Non-Unemployment of Vocational Students," was discontinued. The acronym SPAN remained and the project to "span" the gap between school and work eventually became SPAN: Start Planning Ahead Now.

> involved for employment. In junior high school, students explore several specific clusters of occupations through hands-on (psychomotor) experiences as well as through classroom instruction. At the senior high school level students pursue their selected occupational areas, exercising one of three options: (1) intensive job preparation for entry into the world of work immediately upon leaving high school, (2) preparation for post-secondary occupational education in a technical school or formal apprenticeship program, or (3) preparation for a four-year college of university.*

A major purpose of Project SPAN was to develop and implement a program in the public schools to help students plan and prepare for their future life and work and to help bridge the gap between academic activities of the school and the realities of the world of work.

In making a needs assessment upon which the proposal for SPAN funds was based, Memphis City schools collected evidence which indicated that:

1. The school system had within its geographical area predominantly black neighborhoods. Children from these neighborhoods often were from families with low socioeconomic backgrounds and were culturally, socially, and economically disadvantaged. They tended to have a number of special needs.

2. Dropouts were a serious problem in target schools, although relatively few students who had what their instructors judged to be saleable vocational skills left school before graduation.

3. A large number of Memphis high school graduates were attempting to enter the work force without vocational training. Those who did have such training were more successful in obtaining initial job placements. Students from target-area schools who did not have vocational

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*Howard Conley, "Career Education in Rural Schools," ERIC/CRESS Newsletter (Fall, 1972), p. 1.

training were less successful in getting jobs than similar students from non-target schools.

4. There was a need for "quick shot" approaches for giving potential dropouts some basic job skills and attitudes needed for successful job performance.

5. There was no organized student-centered occupational orientation program in the school system.

6. Vocational training in the middle and high school grades would be more successful with the target population if students could develop a realistic concept of work and different job opportunities open to them while still in the elementary grades.

Accordingly, global, or general, objectives were developed for Project SPAN based upon these needs. The objectives were:

1. To develop a comprehensive and continuing program of occupational guidance information and techniques which will, in all grades of school, insure that the maximum number of students in need of vocational training will enroll in such programs and that they will be helpful to bridge the gap between going to school and earning a living.

2. To develop a series of "hands on" and soft education units which will insure maximum relevance of education and skills for entering into employment.

3. To develop within the student a desire to stay in school and obtain a general education and skills for entering into employment.

4. To develop within the student the ability to appraise his occupational goals in a manner equal to his abilities, desires, and the forecasted needs of industry.

5. To develop an overall program of positive relationships with community, parents, consultants, and volunteer workers which will give students an enriched outlook on the world of work.

6. To develop all programs so that the following characteristics prevail:

   a. Student develops self-understanding and self-awareness.

   b. Student recognizes and makes fuller use of the his capabilities.

   c. Student develops positive adjustment to school, community, and home environments.

   d. Student develops self-confidence and self-esteem.

   e. Student develops the ability to make wise decisions.

7. To develop a series of personal inventories which, when given at grades 6, 9, and 12, will indicate realistic soundness of vocational choices.

8. To develop a complete follow-up study which will test the relevance of the total project.

Project SPAN was organized with three components, one each to serve children on the elementary, middle, and high school levels. Specific objectives were formulated for each component, and they are given in the sections of this report discussing the three parts of the project.

To help implement the program, a director, an elementary curriculum specialist, and a middle school curriculum specialist were employed to serve all schools in the project's target area. At the high school level, one person was employed to develop a computerized job information and job placement program and also to provide vocational guidance and personal counseling for students. There also were two cooperative program coordinators, who directed students' work-study programs and had among their duties the contacting of prospective employers and placement and supervision of students in part-time jobs. Two coordinators were employed to serve a similar function on the middle school level. To help implement the elementary school component, nine technical apprentices and instructional aides were employed. Their major function was to visit the elementary schools served by the project and to assist teachers with a series of activities designed to help introduce young children to simple hand tools and to help them make simple items which would improve both their knowledge of tools and materials associated with different occupational fields and their manipulative skills.

Different procedures were associated with the three components of Project SPAN. The elementary school phase was designed to provide basic career education information to a group of disadvantaged, predominantly black children and to stress positive attitudes toward the world of work. This program was expanded in the middle school, with emphasis on the kind of training needed for the students considering entering different job fields. Over-age students who were considering dropping out of school were provided with work-study experiences, and the kinds of attitudes and personal development needed for successful entry and advancement through various occupational fields were stressed. The services of the project became more varied and complex in the high school grades as students neared the time when they would leave the classroom and enter an occupational field. Project activities in high school included:

1. Cooperative classes in which students receive information about basic skills needed to get and hold jobs, and in which the necessity for acceptable attitudes and job performance are stressed.

2. "Quick shot" courses for seniors about to enter specific jobs in which skills and knowledge related to those jobs are discussed.

3. Work experiences during school hours as part of the cooperative program. SPAN personnel were responsible for placing students participating in the co-op program in jobs and supervising their on-the-job training and performance.

4. Summer school programs for those not enrolled in regular vocational classes and not going to college. Basic skills needed to get and hold a job are stressed.

5. Development of information packets for counselors on different occupational fields.

6. Development of a computerized job information and placement program for seniors.

7. Coordination of SPAN with incoming Project INFOE, a program combining data processing and microfilm techniques to help the student find localized information about job opportunities in various fields. The program is similar to the VIEW component developed by the Appalachian Educational Laboratory. Information is delivered to students via microfilm readers and reader/printers.

Project SPAN has developed a variety of other printed materials in addition to those mentioned above. These include the following:

1. An occupational orientation guide for teachers of grades 4, 5, and 6, to use with the 10 guidance films developed for elementary school children. These guides typically contain suggested units of study built around the films, exercises for pupils relating the films to such content areas as language arts, science and mathematics, and suggestions for the

making by pupils of simple objects, such as electric motors or scrapbook covers.

2. *A Curriculum Guide for Occupational Orientation and Exploration in Junior High School Home Economics and Industrial Arts* includes discussions of specific jobs within each of these occupational fields.

3. *A Career Development Worktext for Junior High School Students* emphasizes the need for personal development, planning for the future, choosing a field suited for the pupil, and information on how to apply for a job.

4. *A Course of Study for General Cooperative Education* was developed to aid high school teacher-coordinators of cooperative education in providing general employment information to young beginning employees, regardless of their occupational objectives.

5. Outlines for "quick shot" courses were designed to help prepare high school students for specific jobs.

Funds budgeted for each of the first two years of the project were as follows:

1970-71	$111,605
1971-72	166,495
1972-73	151,900
TOTAL	$429,000

Of these funds, 100 percent were provided under the federal act mentioned at the beginning of this chapter. In-kind contributions by the Memphis school system were not itemized in the project's budget documents. It should be emphasized that the vocational guidance films developed by the project for the elementary grades were available for use by all schools within the viewing area of the Memphis public television station in West Tennessee, Arkansas, and Mississippi, as well as in non-target schools in the Memphis-Shelby County area. The publications previously mentioned also were available for use by non-target schools and a number of other Memphis schools did utilize them and the films. Thus, it is nearly impossible to obtain an accurate estimate of the total pupil population served by SPAN.

In seeking third party evaluation SPAN personnel solicited evaluation bids according to specifications. The Bureau of Educational Research and Service (BERS), College of Education, The University of Tennessee, Knoxville, submitted the bid which was awarded the SPAN evaluation contract. Evaluation efforts covered the three years of the Project's duration. Evaluation moved from attempting to establish a design for evaluation, to collection of baseline data, evaluation of process and context, formative or monitoring activities, and finally to summative or product evaluation. Career education, a new concept, necessitated some experimentation to obtain satisfactory instruments and to establish adequate evaluation design.

The basic evaluation design included a combination of elements: selection and use of control groups for comparison purposes; some utilization of a pre-/posttest design (population and sampling)to attempt to measure increases which might be attributed to the exemplary project; and some posttest analyses. Basic instrumentation for the evaluation, besides especially made questionnaires, included the Gordon Occupational Checklist, the Crites Vocational Development Inventory (VDI), and an adaptation of the

Westbrook Vocational Maturity Scale. The Westbrook was adapted to make the language more suitable for elementary school pupils and, through a process of random selection, items from the Westbrook were arrayed into six subtests of 20 items each. A multiple-matrix, random sampling design was used to distribute the subtests throughout a large population (control and experimental). Other sources of data were interviews, site visits, reviews of materials, and review of management/administration activities.

Basic monitoring of project administrative techniques relied upon the completion of quarterly and interim reports as required by the USOE within the proper time frames. Also, evaluation personnel visited SPAN to observe project staff in operation and observed various other administrative procedures. A discussion of the evaluation of these efforts is provided in a proper section.

One major purpose of exemplary projects, over and above an attempt to get a new program underway, is that the results of the program need to be disseminated widely. Several attempts to disseminate pertinant information relative to SPAN were undertaken and evaluated. A Final Report section on "Dissemination" includes evaluation of these dissemination activities.

Throughout the duration of the project evaluation several problems occurred which caused concern to the evaluation staff. These problems ran the gamut from "slightly irritating" to "of major concern" in terms of affecting the validity of the evaluation. For example, although a multiple matrix sampling design is highly dependent upon complete randomization both of items for the subscales and for distribution of those items across the population, there were obviuos disruptions on the part of the SPAN staff with the process. (More detail is provided in the specific section.)

In general, SPAN made some significant beginnings in career education in the Memphic City Schools. Although there were some problems, a general rating would suggest that the project satisfactorily achieved the majority of its objectives. One must necessarily remember that SPAN was a beginning--a prototype. Other career education projects will have advantages because they will be able to draw upon the knowledge generated by projects such as SPAN and avoid many of the errors inherent in new programs.

Evaluation efforts included a number of personnel. Overall direction was through the Bureau of Educational Research and Service (BERS) of the College of Education, The University of Tennessee, Knoxville. The Tennessee Research Coordinating Unit for Vocational Education provided valuable assistance. The following persons assisted in evaluation efforts:

Dr. Charles Peccolo, Director, BERS
Dr. Charles Achilles, Coordinator for Field Services, BERS, and overall evaluation director for SPAN
Dr. Robert Roney, Director, UT Center in West Tennessee (Memphis) and on-site director of SPAN evaluation
Dr. John Ray, Associate Professor, Curriculum and Instruction, The University of Tennessee, responsible for data processing
Dr. Douglas Norman, Director, Upper Cumberland Reading Project
Dr. Gary Bice and Dr. Walter Cameron, Tennessee RCU
Ms. Doris Lyons, Graduate Assistant, BERS
Mr. Francis Gross, Institutional Research, UT System

Special thanks is extended to Project SPAN staff, personnel of the Memphis City Schools Division of Vocational Education, all of the teachers and administrators who participated in the evaluation effort, and all of the pupils who responded to evaluation instruments.

It should be noted that during the course of the three year exemplary project there was considerable unrest in the school system and a number of things happened which had a negative effect on student and teacher morale. During this period the Memphis City School System was in the process of decentralizing its organizational structure. As might be expected, there were times when lines of authority and responsibility were not completely clear. This had little direct influence on Project SPAN since lines of communication were well-defined for the project--its function was not decentralized--but indirectly, through general uncertainty on the part of teachers and principals, it had a distracting effect.

More serious, however, were the disruptive effects of the series of steps taken in the desegregation of the school system. During the three years in question (1970-73) several court orders were handed down and implemented. Many teachers were transferred into entirely new teaching situations and were expected to adjust, with little preparation, to students with vastly different backgrounds than those these teachers had previously taught. Students also were shifted into new situations, often more than once during this period. The climax of the situation came in January of 1973, halfway through the third year of the project, when the first busing was implemented to further desegregate the schools. Not only were some of the SPAN teachers and students effected directly as they were transferred to new schools, but in the other schools there was considerable unrest attributable to the emotional nature of the issues being discussed at school, at home, and in the community. Many otherwise receptive teachers and students were distracted by this volatile issue.

There was an exodus from the school system of several thousand, mostly white, students and many who remained were upset and difficult to motivate. Among the target area schools, Cypress, Carnes, and Springdale were affected the most directly as each of these schools gained, lost, or exchanged students with other schools. Westside also was affected because the plan announced for the 1973-74 school year heavily involved them.

The effect on the evaluation of a project like SPAN by these uncertainties and disruptions is impossible to measure or adjust. This, then, becomes a major, but unavoidable, limitation of the report.

II. ELEMENTARY COMPONENT

Summary

Project SPAN was designed to serve as an exemplary career education program for grades K-12 and to help meet the needs of inner-city pupils. It had three distinct components for elementary, junior high, and high school students. The elementary phase was designed to make pupils aware of broad career fields and to be the first step in a sequential program leading to career selection and placement by and for high school graduates. The principal vehicle for creating career awareness was a series of television programs produced by SPAN and Memphis' educational television station. Duplicated study guides were produced to help teachers plan preliminary and follow-up activities for use with the TV programs. The elementary component of SPAN also sought to increase teachers' occupational sensitivity. A major result of process evaluation was reducing the number of elementary schools served by SPAN and setting up three demonstration centers, each with a full-time career education resource person. The component was judged to have satisfactorily achieved its objectives, and the objectives were assessed as having legitimacy and value in light of the project's context.

Objectives

Specific objectives for the K-6 component of Project SPAN, as given in the project's original proposal, essentially were open- or activity-oriented in nature. They dealt with inputs of the project in the elementary grades rather than with anticipated outcomes. The objectives, which were unchanged during the entire three years of Project SPAN, were as follows:

1. To develop a series of guidance films for educational television (ETV) which were designed to give maximum emphasis to preparing a youngster to select realistic life goals leading toward specific educational preparation in the middle and high school grades.

2. To develop "educational inserts" (printed materials) which would correlate the ETV film series with other television programs and curricular elements in the science and social studies areas.

3. To develop a program of "hands-on" activities (in which children worked with simple hand tools and made simple objects) which tended to improve manipulative skills during the pupils' early years.

4. To develop a high degree of occupational sensitivity within the elementary school teacher.

Scope of Program

During the first two years, the project attempted to expand its services to as many elementary schools as possible within the inner-city area of Memphis. By the end of the second year (1971-72), 15 elementary schools were participating in the elementary component. No full-time career education teachers were provided for the participating schools by the project. Instead, it sought to work through the permanent teachers in target schools through services provided by special personnel to help these teachers implement the career awareness phase of a career education program. An elementary curriculum specialist was employed by the project to develop printed material used with the ETV programs and in other career awareness activities. Nine technical apprentices and instructional aides were also employed to go from school to school to assist regular teachers in implementing planned procedures for the elementary school component, especially manual or hands-on activities for use with the ETV programs and special units of study planned by the teachers.

At the beginning of the third year (1972-73), the number of elementary schools served by Project SPAN was cut from 15 to three. This action was in response to process evaluation and recommendations in the 1971-72 evaluation report. Among these were the following:

> 1. That the scope of the elementary component be narrowed so that it can concentrate on developing a few exemplary centers. The present scope (during the first two years of the project) is such that, in all probability, this development cannot occur. The average contact between SPAN aides and pupils at target schools was only two or three hours each month. That this occurred is no criticism of project officials, nor of the personnel involved; there were simply too many children in too many schools for available personnel to concentrate their efforts on any one group. A workable solution would appear to be to reduce the number of schools served by the elementary component from the present 15 to about three. This recommendation would enable the project staff to work closely with students and teachers in helping them understand the methods and the underlying philosophy of Project SPAN and to concentrate their efforts on a small group of students, so that the impact of those efforts could be adequately measured.

2. That each center be staffed with a full-time career education specialist who can work with pupils of the entire school, with their teachers, and with visitors who wish to observe and perhaps participate in the activities of an exemplary career education program in the lower grades. It also is recommended that time be made available, if needed, for the specialist to visit other Memphis city schools to help them use the SPAN program.

3. That the career education specialist work closely with other teachers at the demonstration school to help them properly use SPAN materials, including such activities as preparation of pupils for doing televised guidance films, follow-up discussions using printed inserts which have been correlated with the inquiry approach of the films, and actual experience in the use of simple hand tools and materials in making items related to different career fields.

4. That each center be equipped with a working television receiver, an ample supply of printed material related to the films, tools and materials needed for the hands-on experiences, and with other available materials on career education of interest both to teachers and children at the demonstration school and to visiting educators.

Procedures for Meeting Objectives

The first three objectives of the elementary component were concerned with developing a series of programs to be broadcast by ETV and related printed materials and manual arts or hands-on activities to be used in connection with the programs. These objectives and procedures were in keeping with the career awareness emphasis of the elementary program. During its first year, Project SPAN entered into a contractual agreement with Station WKNO, the public educational television outlet in Memphis, to produce 10 15-minute guidance programs designed to introduce elementary school pupils to the world of work and to a number of career clusters. The programs also sought to improve pupils' opinions of persons working in these fields and to develop the children's confidence in their ability to get worthwhile jobs when they finish school.

Work on the series was begun in 1970-71 and completed during the second year of Project SPAN. Some of the films were telecast on a pilot-test basis during the first year of the project, and the entire series of 10 programs was shown during both 1971-72 and 1972-73.

Curriculum specialists on SPAN's staff also developed a series of printed materials used to introduce the television programs to pupils, to stimulate follow-up discussions, and to relate the programs to such content areas as science, social studies, language arts, and mathematics. These materials were duplicated and distributed to teachers in target schools. A sample set of such materials was included in Appendix A of the 1971-72 evaluation report. These duplicated materials also contained descriptions of suggested manual or hands-on activities which could be done by the elementary school students and which would help them relate to the various career clusters portrayed in the ETV programs. Hands-on experiences suggested included making wooden covers for scrapbooks, laying brick, making simple electric motors, using simple drafting tools, and replacing faucet washers. During the first two years of the project, the hands-on experiences were conducted at target schools with the assistance of itinerant technical and instructional aides provided by the project. During 1972-73, the project's final year, assistance for these activities was provided by SPAN resource teachers in the three demonstration centers which were established.

To meet the fourth objective of the elementary component, a series of workshops for teachers was held. Members of the project staff also worked on a one-to-one basis with individual instructors at target schools to help them develop greater understanding and support for career education in the lower grades.

Instructional Activities

The 10 television programs developed by Project SPAN and WKNO in the career awareness phase of the exemplary career education program dealt with the following topics:

1. "Why We Work"--an orientation film to introduce elementary school pupils to the world of work.
2. Construction occupations.
3. Transportation occupations.
4. Health occupations.
5. Office occupations.
6. Communications occupations.
7. Manufacturing occupations.
8. Sales occupations.
9. Food services occupations.
10. General service occupations (such as Fire and Police departments).

During the second and third years of Project SPAN, each of these programs was shown three times by Station WKNO. Each program was telecast three times and could either be viewed in the target schools as it was telecast or, if a more convenient time were desired, as a kinescope (filmed copy) of the television videotapes which could be shown on a 16-mm. sound projector.

General goals of films were to acquaint target school children in grades five and six with the nine career clusters which were featured, to emphasize jobs for which the children could reasonably be expected to have interests and aptitudes, and to help pupils develop positive personal attitudes for work through the showing of gainfully employed persons from different backgrounds.

Classroom activities related to SPAN television programs were broken down into three categories: (1) preparing pupils to view the programs; (2) follow-up class discussions about what had been televised; and (3) using printed materials developed by SPAN and hands-on activities suggested in the materials.

Evaluation of SPAN Programs and Related Materials and Activities

Evaluation of the ETV programs, related printed materials, and hands-on activities was substantially completed in 1972 and was reported in the second year's evaluation document. These activities were related to three of the four objectives for the elementary component as contained in the original project proposal. Reference is made to evaluation information and data on pages 10 through 27 of the 1971-72 evaluation report.

No attempt will be made in this document to duplicate the extensive evaluation report on the ETV programs and related materials and activities. Two rating scales were developed for use in evaluating each program; one was based on criteria for occupational films developed by the National Vocational Guidance Association (NVGA), and the other was a locally made instrument for rating technical aspects of the programs. A panel of three outside evaluators viewed all the programs on monitors at the studios of Station WKNO. Quality of the films was judged to be consistently high, both in technical aspects and in adherence to NVGA standards. Feedback collected from teachers in target schools during 1971-72 indicated that the programs were not reaching all pupils for whom they were intended. Two causes appeared to be the lack of working television receivers in classrooms and the irregular scheduling of films by the ETV station. As a result of this feedback and other information from teachers, it was recommended that the number of target schools in the elementary component be cut from 15 to three and that a full-time career education resource teacher be assigned to each school by the project. These changes were designed to insure that all target pupils would have access to the television programs and related material and that target-school teachers would receive assistance from full-time career education resource persons.

The same feedback questionnaire given target-school teachers in 1971-72 was administered to faculties of the three demonstration schools in 1972-73. Findings indicated that there was a substantial increase in the number of SPAN television programs seen by pupils and in the amount of time spent in preparatory and follow-up activities. There also was an increase in use of duplicated materials. A comparison of teachers' responses to 1971-72 and 1972-73 feedback instruments is given in Table II-1.

As a result of the development of materials discussed in preceding paragraphs, it was concluded that three of the four objectives of the elementary component had been met by the end of the project's second year. It should be pointed out again that the objectives were written so that the quality of the print and audiovisual materials was not a factor, although this was judged to be quite high, especially considering the limited amount of funds available for the television programs. It should also be reemphasized that objectives were stated in terms of project inputs rather than outcomes, so that there were no standards by which to judge the effectiveness of the material on the target school children.

The fourth objective--to develop a high degree of occupational

TABLE II-1

TEACHER FEEDBACK AND ATTITUDE RESPONSE FOR SELECTED ITEMS: SPAN ELEMENTARY SCHOOLS*

Abbreviated Item	Response	1973 (N = 38) Number	1973 (N = 38) Percent	1972 (N = 63) Number	1972 (N = 63) Percent
Is there a workable television in your classroom?	No Response (N/R)	2	5%	2	3%
	Yes	28	74	20	32
	No	8	21	41	65
If not, do you have access to a TV for SPAN?	Not applicable (N/A), N/R	26	68%	15	24%
	Yes	9	24	43	68
	No	3	8	5	8
How many SPAN films have you viewed this year?	None	1	3%	8	13%
	1 - 3	9	24	14	22
	4 - 6	7	18	32	51
	7 -10	21	55	8	13
	N/R	0	0	1	2
Were films shown at convenient times?	N/R	5	13%	6	10%
	Yes	28	74	21	33
	No	5	13	36	57
How much average weekly time did you spend preparing pupils to view the films?	N/A, N/R	3	8%	20	32%
	Less than 30 minutes	10	26	31	49
	30-60 minutes	20	53	12	19
	More than 60 minutes	5	13	0	0
How much average weekly time did you spend discussing films?	N/A, N/R	3	8%	16	25%
	Less than 30 minutes	13	34	35	56
	30-60 minutes	17	45	12	19
	More than 60 minutes	5	13	0	0

*Full Questionnaire is provided in Appendix A.

TABLE II-1 (Continued)

Abbreviated Item	Response	1973 (N = 38)		1972 (N = 63)	
		Number	Percent	Number	Percent
How much average weekly time did you spend using SPAN printed materials?	N/A, N/R	3	8%	8	13%
	Less than 30 minutes	11	29	28	44
	30 - 60 minutes	16	42	24	38
	More than 60 minutes	8	21	3	5
Did you use SPAN kinescopes?	N/A, N/R	7	18%	14	22%
	Yes	14	37	9	14
	No	17	45	40	64
How many kinescopes have you seen?	N/A, N/R	16	42%	Too few "yeses" to previous item for computation	
	1 - 3	14	37		
	4 - 6	8	21		
	7 -10	0	0		
Did you regularly stay with your pupils when they met with the SPAN teacher? (combination of two questions)	N/A, N/R	22	29%	52	41%
	Yes	48	63	43	34
	No	6	8	31	25
Effectiveness of SPAN teacher?	N/A, N/R	0	0%	4	6%
	Ineffective	1	3	2	3
	Effective	6	16	37	59
	Very effective	31	81	20	32
Did your principal know of and support SPAN?	N/A, N/R	6	16%	9	14%
	Yes	31	81	45	72
	No	1	3	9	14

sensitivity among elementary teachers--did imply an unspecified degree of change among project recipients. The 1971-72 evaluation report contained a report on the data from a locally designed instrument given to three groups of teachers in an effort to measure any changes in their degree of occupational sensitivity (pages 11 through 19). The instrument was given to a group of SPAN teachers who had recently completed a special summer workshop, a second group of SPAN teachers who had not been to the workshop, and a third group of teachers not affiliated with the project who served as a control. The results of this study, as explained in the second year's evaluation report, indicated that SPAN teachers who had attended the workshop showed a higher degree of sensitivity toward a broad spectrum of jobs than did the SPAN teachers who had not attended the workshop and those in the control group. It was concluded that special workshops were helpful in meeting this objective and their continuation was encouraged.

The same instrument was given to teachers in six SPAN schools near the end of the project's final year. Findings, as given in Table II-2, indicate that the 1972-73 sample displayed greater occupational sensitivity than the 1971-72 control group and non-workshop SPAN teachers, but not as much as those who attended last year's workshop. It was concluded that the value of workshops to increase occupational sensitivity was reinforced, although it appears that continued service in a career education program also results in increased sensitivity. The permanence of change effected through the workshop is uncertain, since no follow-up study of the 1971-72 workshop participants was conducted.

TABLE II-2

A COMPARISON OF INDICES OF OCCUPATIONAL SENSITIVITY AMONG SPAN AND NON-SPAN TEACHERS

1971-72 Teachers		1972-73 SPAN teachers	Index
Workstop Participants	7.96	Elementary	7.52
SPAN Elementary Teachers	7.17	Junior High	7.52
Control Teachers	7.34	High School	7.31

Teachers' Rankings of Academic and Career-Related Subjects

Teachers in SPAN schools served by all three project components--elementary, junior high school, and senior high school--were asked in 1972-73 to rank in terms of importance to their students eight subjects, four in the traditional academic realm and four which were related to four career clusters. The former were English grammar, mathematics, science, and social studies. The latter were construction occupations, consumer homemaker occupations, manufacturing, and transportation occupations. Mean ratings and rankings of the eight subjects by elementary, junior high school, and senior high school teachers are found in Table II-3. A copy of this instrument in included as Appendix A.

The rankings fall into two distinct categories. All three groups of teachers ranked the four academic subjects as more important to the needs of their students than the four career-related subjects. English grammar was ranked as most important by elementary, junior high, and high school teachers. Modal rankings for the other academic subjects were as follows: mathematics, second; science, third; and social studies, fourth. For the career-related subjects, modal rankings were, in order, consumer-homemaker occupations, construction occupations, manufacturing, and transportation occupations.

TABLE II-3

SPAN TEACHERS' RANKINGS OF ACADEMIC AND SPECIFIC CAREER-RELATED INSTRUCTIONAL AREAS ACCORDING TO PERCEIVED IMPORTANCE

	Elementary		Junior High		Senior High		Modal
Subject	Mean	Rank	Mean	Rank	Mean	Rank	Rank
English Grammar**	3.5	1	2.8	1	2.0	1	1
Construction Occupations*	6.2	8	5.8	6	5.7	6	6
Consumer-Homemaker Occupations*	5.6	5	5.6	5	4.5	5	5
Manufacturing*	6.1	7	6.3	7	6.0	7	7
Mathematics**	3.5	1	3.2	2	2.4	2	2
Transportation Occupations*	6.0	6	6.9	8	6.2	8	8
Science**	5.0	3	4.9	3	4.2	3	3
Social Studies**	5.1	4	5.3	4	4.4	4	4

*Career-Related subjects. **Academic subjects.

The rankings were similar to those of the same subjects by another group of SPAN teachers in 1971-72. It could be concluded that even though SPAN teachers had increased in occupational sensitivity, as indicated by Table II-3 they still believed that basic academic subjects were vital as foundations for career-related subjects. Another conclusion could be that three years' participation in a career education program is insufficient to change perceptions of academically-oriented teachers, even in light of the special needs of inner-city students. They teach as they were taught.

The results of the 1971-72 and 1972-73 testings are such as to suggest that substantial progress has been made toward completing the elementary component's fourth objective. As with many programs designed to change attitudes, it is difficult to determine the depth or permanence of increases in occupational sensitivity among teachers. It may be speculated that a longer and more intensely personal exposure to the principles of career education might be necessary in order to change the attitudes of elementary school teachers who have had little exposure to or experience with occupations which do not require academic training. A follow-up study of the permanence of the indicated change in teachers' attitudes toward the world of work certainly would be in order. Given the problems in determining the degree and nature of change in such an ill-defined area as occupational sensitivity, it nevertheless appears from the data available that the fourth objective of Project SPAN's elementary component was met to a satisfactory degree.

Benefits of Program Not Covered by Objectives

There are some beneficial aspects of the elementary component of Project SPAN which were not targeted in the component's objectives. Among these are relating content-area subjects to the world of work (which, it is hoped, will make these subjects more meaningful to inner-city children) and increasing students' knowledge of careers. The career education model demonstrated by Project SPAN is intended to be a vehicle for instruction. Rather than being a separate course of study, career education becomes a means for infusing the regular curriculum with new ideas and new meaning. Project SPAN recognized this and encouraged teachers to develop a series of units to relate career clusters to content areas. Although improvement in classroom instruction is not mentioned in the objectives of the elementary component, it was one of the major goals, either stated or unstated, of the career education model being demonstrated by the project. Besides creating awareness of the world of work among young pupils, a major purpose of career education in grades K-6 may be said to be improvement of instruction by making more apparent to pupils the link between such subjects as mathematics, science, and language arts with the various occupations. The use of various occupations as a basis for lessons and units of study in different content areas also provides teachers with fresh sources of ideas for motivating students and presenting information,

There are no hard data available to substantiate the degree to which Project SPAN has accomplished this improvement in its target schools. The assumption must be, however, that there was more teaching of this type in target schools as a result of Project SPAN than before the project began. This was confirmed by observations of outside evaluators in target schools, especially in the demonstration schools which were established in 1972-73 as a result of earlier process evaluation.

A significant increase in the level of pupils' knowledge of different careers was indicated by an instrument given to a sample of SPAN pupils in 1973.

In an attempt to measure the knowledge of vocations among elementary school pupils in grades four through six, a multiple-matrix sampling technique was used. In this technique, the Westbrook Vocational Maturity Scale (120 items) became the pool of items. These 120 items were randomly assigned to six subtests of 20 items each. Youngsters in grades four, five, and six of four elementary schools were the pupil population. Three of the schools participated in Project SPAN; the fourth school served as control. The six subtests of the revised Westbrook Scale were scheduled for random distribution among all youngsters in the total population. Arithmetic computations could provide an estimate of the vocational knowledge of the total population, and appropriate data manipulations an estimate of the knowledge of the various sub-populations.

NOTE: There is some concern about the total accuracy of the following computations due to the fact that the SPAN staff did not completely follow the initial design for the distribution of 10 of the subtests. However, due to the large number in the sample, it was determined that the data would be presented and analyzed as though the initial design had been carried through. The exact number of cases where the initial design was deviated from is not certain, and certain *a priori* considerations in the initial data tabulations suggest that the data do provide an accurate picture for gross analyses. For example, the mean score for grades four, five, and six increase correspondingly--a probable phenomenon of reading level on the subtests. (The original Westbrook Scale was slightly modified in an attempt to meet a fourth-grade reading level; however, many youngsters in the inner-city schools were not reading up to grade level.) A copy of this instrument is included as Appendix B.

The Mallory School provided a control group, and a *t*-test was used to compare this school with the three target schools. Results of those tests show a statistically significant difference between the means of the control group and each experimental group. These results are shown in Table II-4, and a *t*-test was computed between the means of the total SPAN school population and the non-SPAN school population. A significant

TABLE II-4a

COMPUTATION OF SIGNIFICANCE OF DIFFERENCES IN MEANS OF SELECTED SCHOOLS ON THE MULTIPLE-MATRIX DESIGN, REVISED WESTBROOK OCCUPATIONAL MATURITY SCALE (t-TEST)

Groups (Schools)	df	N (Pupils)	Mean	Standard Deviation	t-Value
Mallory (control)		145	7.13	3.45	4.24*
Klondike (SPAN)	341	198	8.93	4.43	
Mallory		145	7.13	3.45	5.54*
Springdale	443	300	9.12	3.74	
Mallory		145	7.13	3.45	6.24*
Carnes	562	419	9.44	4.80	
Non-SPAN		173	7.93	4.15	3.36*
All SPAN	1022	851	9.11	4.46	

*Significant at or beyond .01.

At 120 df, $t(.0005) \geq 3.373$†
At ∞ df, $t(.0005) \geq 3.291$

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†W. J. Popham and K. A. Sirotnik, Educational Statistics: Use and Interpretation (2nd edition; New York: Harper and Row, 1973), p. 384.

TABLE II-4b

WESTBROOK OCCUPATIONAL MATURITY DATA
PROJECT SPAN: SPRING 1973

Data Category	Frequency	Percent	Mean	Standard Deviation
School				
Klondike	198	18.6%	8.93	4.43
Carnes	419	39.5	9.44	4.80
Springdale	300	28.2	9.12	3.74
Mallory	145	13.7	7.13	3.45
TOTAL	1062	100.0%	8.94	4.43
Sex				
Male	510	48.0%	8.84	4.36
Female	549	51.7	9.04	4.48
No Answer	3	0.3	--	--
TOTAL	1062	100.0%	8.94	4.42
Grade				
4	383	36.1%	7.60	3.99
5	361	34.0	9.08	4.41
6	318	29.9	10.40	4.47
TOTAL	1062	100.0%	8.94	4.43
Enrollment Time				
Before this year	538	50.7%	8.69	4.15
At first of year	222	20.9	9.67	5.04
Between first of year and Christmas	62	5.8	8.66	4.45
After Christmas	218	20.5	9.00	4.30
No Answer	22	2.1	8.65	4.25
TOTAL	1062	100.0%	8.96	4.42
Race				
Black	976	91.9%	8.87	4.46
White	53	5.0	10.91	3.68
Other or No Answer	33	3.1	7.80	2.78
TOTAL	1062	100.0%	8.97	4.44
Project SPAN Participation				
Yes	851	80.1%	9.11	4.46
No	173	16.3	7.93	4.15
Don't Know or No Answer	38	3.6	8.00	2.98
TOTAL	1062	100.0%	8.90	4.42

TABLE II-4b(Continued)

Data Category	Frequency	Percent	Mean	Standard Deviation
Score Value			8.94	4.43
1	9	0.8%	Median = 8.22	
2	43	4.0		
3	52	4.9	Min = 1	
4	71	6.7		
5	83	7.8	Max = 20	
6	101	9.5		
7	102	9.6		
8	97	9.1		
9	79	7.4		
10	75	7.1		
11	55	5.2		
12	49	4.6		
13	52	4.9		
14	34	3.2		
15	46	4.3		
16	38	3.6		
17	40	3.8		
18	22	2.1		
19	11	1.0		
20	3	0.3		

difference was also observed in this t-test. The results of these tests suggest that youngsters in grades four through six of SPAN schools had a higher level of knowledge of vocational and occupational choices than youngsters not in the SPAN program. The reader must also be cautioned in considering these data that the Memphis city schools were subject to a court-ordered busing which confused the initial pupil makeup of the various schools. In addition, not all youngsters had an equal amount of exposure to the SPAN program. No correction was attempted in the data for these phenomena, since the busing was extensive.

The evaluators believe that it safely may be concluded that exposure to Project SPAN provided the youngsters in elementary school with more awareness of occupational concepts than pupils of schools where there was no emphasis on Project SPAN.

Assessment of Component Objectives

Evaluation as defined by Stufflebeam and others can involve one or more of the following:

1. Measurement of individual and group achievement through the administration of published and locally made instruments.

2. A determination of the degree of congruence between project objectives and project outcomes.

3. Determination of project outcomes through observation and professional judgment by a qualified group of outside evaluators.

It has also been stated that evaluation should consider the legitimacy and value of objectives of the program being evaluated as well as comparing outcomes against these objectives. Although such an approach may go beyond the narrow definition of "evaluation" to the somewhat broader concept of "assessment," it perhaps is proper that, at the end of a project such as SPAN, the objectives of its various components be examined for their legitimacy as well as the congruence between them and program outcomes.

When the value of the objectives of Project SPAN's elementary component is considered in light of other programs which possibly could have been proposed in competition for limited funding, the performance objectives seem worthwhile in terms of encouraging innovative and more meaningful approaches to classroom instruction than previously had been used in many target schools and in helping elementary school pupils to become aware of and familiar with various career clusters, to see the worth of persons engaged in different occupations, to understand the link between academic subjects and desirable jobs, and to develop a greater appreciation of their own self-worth.

The elementary objectives also encouraged teachers to become more aware of the way in which academics can be related to work and the value to our society of persons who work at many different kinds and levels of careers.

While obviously not stated in precise performance terms, the component's objectives did set a direction for the program which should have been helpful to project staff and persons served.

Recommendations for Recycling Program

As a result of evaluating the three-year program of Project SPAN's elementary component, the following recommendations are made to those educators interested in replicating or recycling an elementary school career education program aimed at creating occupation awareness:

1. A component designed to make elementary school children aware of the many diverse job opportunities should be part of an overall career education program.

2. Such a component can form the basis for making classroom instruction in several content areas more meaningful to children, especially to those who are little interested in academic work and who are potential dropouts.

3. Instructional television, where available, can be a valuable vehicle for creating career awareness.

4. Any use of instructional television should be supplemented by printed material designed to form the basis for introducing television programs to pupils and for follow-up academic activities in mathematics, language arts, and so on.

5. Manual arts, of hands-on, activities permit pupils to have an enjoyable change of pace from regular classroom activities and to see the concrete results of work in different fields.

6. Preservice and inservice programs and workshops can be valuable in helping teachers to become more aware of and sensitive to the demands and rewards of various occupations and also to implement classroom career education activities in a skillful way.

7. School systems interested in elementary school career education programs should make use of the experiences of exemplary programs such as Project SPAN. Rather than beginning from scratch and developing new programs and materials, systems should consult with present and former officials of such projects and utilize to the greatest extent possible printed and audiovisual materials already completed. The television series of

Project SPAN, for example, could be adapted for use in many places, as well as the duplicated materials for use with the programs.

Field Trips

Pupils in the three elementary schools serving as SPAN demonstration centers in 1972-73 participated in at least 211 field trips, according to quarterly reports by the project's administrative office. These were in connection with the career awareness phase of SPAN and were to business, industrial, educational, cultural, and governmental sites.

III. JUNIOR HIGH SCHOOL COMPONENT

Summary

The junior high school SPAN program was originally aimed primarily at eighth and ninth grade students enrolled in home economics and industrial arts classes at Cypress and Humes Schools. Students in grade seven at these schools were included during the 1971-72 school year by the addition of units on career information integrated into the language arts and social studies curricula at the two schools. Also added to the project were grades 7-9 at Westside Junior High School.

During the 1972-73 school year, attempts were made to expand the career education concept into other subject areas in the curriculum. These included mathematics, science, and art. Junior high teachers were encouraged to develop units which would integrate their discipline areas with career education concepts. As an added inducement, the SPAN project paid a $25 stipend to any teacher who developed an acceptable unit. During the 1972-73 school year, 13 junior high school teachers submitted such units.

The major purposes of the SPAN activity at the junior high level were to increase students' awareness of the diversity of available career opportunities and to promote a positive attitude toward the world of work. Peripheral to these two overall objectives and supposedly as a consequence of them, it was hoped that the dropout rate would be reduced and that students would remain in school, thus equipping themselves more adequately for the world of work. A number of inservice activities were conducted for the benefit of the teachers, including summer workshops at the local State university.

The overall objectives of the project were met at a reasonable level as youngsters at the junior high level became much more aware of the world of work around them. This was accomplished through the use of field trips, guest speakers, and units developed specifically for their level in their schools. In most cases, the crucial ingredient in the amount of gain made by the students was attributable to the level of interest and competency of the professional staff at the school.

Objectives

In addition to the eight overall objectives for the project, the original proposal contained two specific objectives for the junior high component. These objectives were maintained throughout the project, and were as follows:

1. Develop a relevant approach to industrial arts and home economics which will keep students in the school.
2. Develop a series of educational inserts which are designed to give students experience in making occupational choices and then enroll in appropriate courses in high school.

The second objective involves the entire curriculum, not just the vocational offerings at the junior high school level.

Scope of the Program

The purpose of the junior high component of Project SPAN was to allow youngsters in grades 7-9 in the Memphis City School System to explore in some depth a wide range of career opportunities. This was to be done not only in the traditional industrial arts and home economics vocational type offerings, but also through the integration of career education concepts into the regular academic curriculum. At the time the proposal was made for the grant for this exemplary project, the Memphis City schools had 134,049 students enrolled, with 34,109 at the junior high level. By the end of the first year of the project, there were 150,657 students in the school system, of which 37,734 were junior high students. From that point forward, primarily because of white flight involved in the desegregation of the Memphis City schools, the enrollment began to decline. By the end of 1972, there were 143,280 students (37,104 junior high), and by the end of 1973, the enrollment had dropped to 129,523 (32,286 junior high) students.

Table III-1 gives the enrollment by school of the three junior highs in the target area for Project SPAN for 1971, 1972, and 1973. It may be noted that at Cypress Junior High School (mostly black students) the enrollment dropped by more than 350 students between the end of 1972 and the end of 1973. This was brought about because of court-ordered busing which required that all ninth grade students from Cypress be exchanged with another school for all seventh and eighth grade students at that school. Whereas the ninth graders from Cypress (mostly black students) were transported to their new school, many of the seventh and eighth grade students who were coming from the predominantly white school chose not to make the transfer and went to private schools instead. At Humes Junior High School (mostly black students), the enrollment increased from the end of 1972 to 1973. This was brought about because of the assignment of additional seventh and eighth graders to Humes from a nearby elementary school which had been for students in grades 1-8 and now became strictly a grade 1-6 school. Westside Junior High School data for 1971 are not reported here since Westside joined the project only after the 1970-71 school year. Overall, then, the project at the junior high level was concerned with a minimum of 2,122 students in the 1970-71 school year, a maximum of 3,616 students in the 1971-72 school year, and finally a reduced number of 3,253 students during the final year of the project.

TABLE III-1

ENROLLMENT IN SPAN JUNIOR HIGH SCHOOLS 1971-73

School	1971	1972	1973**
Cypress	1,619	1,567	1,205
Humes	1,503	1,556	1,625
Westside Junior High*	---	493	423
TOTAL	2,122	3,616	3,253

*Westside Junior High was added to the project the second year.

**The first busing to increase desegregation began during 1973.

Each of the junior high schools involved in the project was staffed with a teacher coordinator. At Westside, since the high school and the junior high were relatively small and were housed in the same facility, the same individual worked with both junior and senior high school students. The duties of the teacher coordinators were to work with other faculty members in furthering the objectives of the project, to teach co-op classes for overage students who were potential dropouts, to arrange for speakers and field trips in cooperation with the regular classroom teachers for all students in grades 7-9, to locate part-time work experiences for those students considered ready and desirous of this experience, and to do follow-up work with students and their employers. These teacher coordinators were selected on the basis of their teaching and guidance credentials and their experience with and empathy for students. Although all had backgrounds which were compatible with the concepts of the project, specific training was required on the job as they attempted to further the objectives of Project SPAN.

Evaluation

During the first year of Project SPAN, the junior high component, as were other components of the project, was involved almost entirely with the developmental phase of the concept of career education as an integrated part of the curriculum. Programs were started, materials prepared, and procedures established. The evaluation of this phase had to be, of necessity, a process evaluation. It was the opinion of the evaluators, based on on-site visits and reports from the staff of the school system that the process was well undertaken during this period and the project objectives were being advanced.

During the second year of the project, product as well as process evaluation was possible. As a part of the program to expand the experiences of students and broaden their knowledge of the variety of jobs available in the world of work, the SPAN project provided field trips for students at the junior high level in the target area schools. Also, resource speakers were brought into the schools to speak to groups of students about various types of careers. The trips and speakers represented a broad range of career opportunities, including public services, medically-related services, communications, sales, manufacturing, foods, general services, and distribution. During the 1971-72 school year, students from Humes Junior High took 12 field trips, while those at Cypress took seven. No field trips were reported for junior high students at Westside. During the 1972-73 school year, students from Humes Junior High were taken on 16 field trips, while those from Cypress went on three. Throughout the final two years, numerous resource speakers were brought to the schools both for large group and small group presentations in cooperation with the regular classroom teachers.

One activity at the junior high level was specifically aimed at overage students who had had some difficulty in school and were in danger of dropping out. This was the junior high co-op program. The program consisted of a special class of students who had already attained their sixteenth birthdays, but were still in the ninth grade. These students were of legal age to be able to gain employment provided they had the desires, skills, and opportunities available to them. Table III-2 displays information about the co-op program for all three years of the project. Although the total number of students involved in this stage of SPAN was relatively small, it should be noted that these were very difficult students in terms of their backgrounds and a lack of success in school. As the data in this table reveal, the percentage of placement of these relatively young workers on temporary part-time co-op jobs was very high. It is notable also that most of these students continued their education at the high school level the following year. The about various types of careers. The trips and speakers represented a broad range of career opportunities, including public services, medically-related services, communications, sales, manufacturing, foods, general services, and distribution. During the 1971-72 school year, students from Humes Junior High took 12 field trips, while those at Cypress took seven. No field trips were reported for junior high students at Westside. During the 1972-73 school year, students from Humes Junior High were taken on 16 field trips, while those from Cypress went on three. Throughout the final two years, numerous resource speakers were brought to the schools both for large group and small group presentations in cooperation with the regular classroom teachers.

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In line with the two objectives for the junior high school component of Project SPAN, namely that students be encouraged to stay in school and that they be given experiences in making occupational choices, two major criteria were used. First, a comparison was made regarding the rate of dropouts from the SPAN schools with these same data from the school system as a whole and from other schools with similar school bodies. As was mentioned in an earlier section of this report, the dropout rate during the third year of the project was considerably contaminated as a criterion in light of court-ordered busing to accomplish desegregation and the accompanying white flight of students from the school system. Interestingly enough, not only did the school system lose white students during

TABLE III-2

JUNIOR HIGH CO-OP PROGRAM, 1971-73

				Placed on Jobs					
	In Class			1973		1972		1973	
Schools	1971	1972	1973	No.	%	No.	%	No.	%
Cypress	17	27	13*	12	71%	20	74%	7	54%
Humes	15	32	17	13	87%	22	69%	17	100%
TOTAL	32	59	30	25	78%	44	75%	24	80%

*Five students were lost from the Cypress Co-op Class when they dropped out of the program in mid-year rather than accept a busing transfer.

this year, but they lost some black students as well. Becuase of the contamination of data by the disruption of the school by the desegregation process, dropout data were meaningless for the final year of the project and were not included here. Data from the first and second years of the project, as reported in the 1971-72 Evaluation Report, showed some positive but inconclusive effects by Project SPAN on the dropout rate.

A standardized instrument used to ascertain occupational interests, the Gordon Occupational Checklist, was modified slightly and used to ascertain the level of interest and knowledge of junior high students in the SPAN project. The modification consisted of adding one item, which asked the students to list all the jobs they could. This item alone does not purport to measure the in-depth knowledge of students regarding the world of work, but was used as an indicator of the students' familiarity of the broad spectrum of types of occupations. Table III-3 presents the data for the mean total scores of the Gordon Occupational Checklist of the three years of the project. Included in this table are data about the three target area junior high schools--Cypress, Humes, and Westside--as well as a control school--Porter Junior High. For a discussion of the reliability and content of the Gordon, see Section III of the 1971-72 Evaluation Report on Project SPAN, submitted in August, 1972. A copy of the modified instrument is found in Appendix C.

Each year of the project, classes were selected at random from each of the target area schools (and during the 1st two years of the project in a control school), and the modified form of the Gordon Occupational Checklist was administered. Table III-3 displays total score data from these test administrations. As can be seen from these data, the results were mixed. In some instances, the total mean scores declined during the course of the project. It is possible that this represents a narrowing of interests rather than a lack of information.

TABLE III-3

MEAN TOTAL SCORES OF THE GORDON OCCUPATIONAL CHECKLIST FOR JUNIOR HIGH STUDENTS, 1971-1973

		Girls		Boys		Total	
School	Year	No.	Mean Score	No.	Mean Score	No.	Mean Score
Cypress	1971	62	36.0	33	50.0	95	40.9
	1972	58	19.6	49	29.4	107	24.2
	1973	26	62.8	123	40.0	149	44.0
Humes	1971	51	58.1	18	29.2	69	50.6
	1972	29	34.1	26	34.0	55	34.1
	1973	78	35.8	68	32.6	146	34.3
Westside*	1972	34	29.6	35	32.5	69	31.2
	1973	32	36.5	47	40.3	79	38.8
Porter**	1972	43	29.9	51	39.4	94	35.3
	1973	76	36.6	85	33.0	161	34.5

*Westside added to project after 1971.
**Control school.

The modification of the Gordon Occupational Checklist which consisted of adding a question which was open-ended in nature allowed the students to list as many jobs as they could. Results of this question over the three-year period of the project are reported in Table III-4. At the end of the first year, the mean number of occupations listed went up sharply at both Cypress and Humes Junior High Schools. However, after the second year and the third year of the project, the number listed was considerably smaller. No explanation seems available for this phenomenon. It seems highly unlikely in light of the activities pursued at the schools during the second and third years of the project that the students knew less about the world of work than they did after the first year. A wide range of explanations might be possible, but will not be attempted here.

TABLE III-4

MEAN NUMBER OF OCCUPATIONS IDENTIFIED BY JUNIOR HIGH STUDENTS, 1971-1973

		Girls		Boys		Total	
School	Date	No.	Mean	No.	Mean	No.	Mean
Cypress	March 1971	79	22.3	73	29.9	152	26.9
	May 1971	79	78.5	73	98.7	152	88.3
	May 1972	58	36.2	49	14.9	107	26.5
	May 1973	25	23.8	118	35.2	143	33.2
Humes	March 1971	41	33.1	13	4.5	54	32.4
	May 1971	41	96.0	13	9.6	54	75.2
	May 1972	29	28.4	26	10.0	55	17.8
	May 1973	68	20.3	50	13.7	118	17.5
Westside*	May 1972	34	43.3	35	32.8	69	38.1
	May 1973	32	38.6	41	35.9	73	37.1
Porter**	May 1972	43	19.6	51	18.5	94	19.1
	May 1973	74	21.9	79	15.7	153	18.7

*Westside added to project after 1971.
**Control school.

The availability of information regarding a wide range of occupational opportunities in the Mid-South region was one focus of the project. Although specific career choices were not likely until the senior high level, a good bit of experience was obtained by students in the junior highs relative to information systems leading them to more knowledge about specific occupational clusters. Two programs were available to students who wanted more information than they were getting in their classes, field trips, or from guest speakers about specific occupations. One of these, Project INFOE (Information Needed for Occupational Enquiry), is a microfilm aperture card information system developed by the Research Coordinating Unit at The University of Tennessee which gives the user in-depth job information about the career of interest. It goes into some detail, giving the equivalent of four typewritten pages on each occupation, localized to the Memphis Delta region.

Another information system developed by the project is the CACI program (Computer Assisted Career Information) which uses a mark sense inquiry approach into the computer to obtain information on a wide range of career opportunities. Cards are marked at the local school, forwarded to the central office computer center, where they are processed through the CACI program. The system has been specially designed to reflect career information for nearly 500 different specific work areas in the Memphis area. Within three days, the student receives a reply--written to him by name by the computer--giving him information about job opportunities, skill and training requirements, working conditions, and pay ranges for the job he has chosen. At the same time, the computer records the student's interest, and a monthly report to the guidance counselor at each school reports all inquiries from that school and they serve as an aid to follow-up counseling. It may also help generate information of value in planning for future curricular changes and for securing appropriate speakers and field trips for groups of students with similar interests. Table III-5 reports the utilization of CACI for the 1972-73 year by junior high school students in the impact area. A request/enrollment ratio was calculated for each of the three schools and overall to give some comparative assessment of the use of this system by junior high schools.

TABLE III-5

USE OF COMPUTER ASSISTED CAREER INFORMATION SYSTEM (CACI)
BY JUNIOR HIGH STUDENTS IN PROJECT SPAN, 1972-73

School	Number of Requests	1973 Enrollment	Request/Enrollment Ratio
Cypress	172	1,205	.143
Humes	185	1,625	.114
Westside	33	423	.078
TOTAL SPAN	390	3,253	.120

IV. SENIOR HIGH SCHOOL COMPONENT

Summary

The SPAN activities in the senior high target schools of Northside and Westside have been carried out through the vocational guidance and counseling centers and the cooperative work-study program. Both were successful in meeting the objectives of the project.

The counseling centers have given every indication that great efforts were made to reach all seniors and assist in their post-graduate placements. (A significant increase in placement was recorded between the 1972 and 1973 project years.) The Computer Assisted Career Information (CACI) and Information Needed for Occupational Entry (INFOE) system were running effectively by the third year. The quick-shot and mini-course have helped seniors in gaining employment both in work-study and post-graduate employment.

The effects of the SPAN project will not cease at the end of the third project year. Plans call for the school system providing funds for the continuance of CACI, inservice training, vocational consultants, resource speakers, and the vocational guidance. Perhaps this action is the most valid indicator of the project's accomplishment that it served as the initial thrust for a continuing exemplary vocational career educational program in the Memphis City School System.

Objectives

The specific objectives of the senior high school component (grades 10 through 12) were developed in the initial proposal and were applicable during the three-year period of the project. They were as follows:

1. To develop vocational guidance and job placement centers which would direct attention to the placement and follow-up of vocational students. Additional objectives of the centers were as follows:
    a. To aid students in the selection of occupational fields of training in relation to their desires, acquired skills, innate abilities, and the forecast demands of industry and business.
    b. To give students personal guidance and counseling in order to aid them in daily problem-solving activities.
    c. To follow up on students as they progress through their training. To develop a workable relationship with each instructor in attempting to understand the potential and limits of each student.
    d. To provide pre-employment orientation in preparation for occupational applications and interviews.
    e. To develop job placement and post-high school educational opportunities for senior and graduate vocational education students within the target area's comprehensive high schools.
    f. To develop an accurate follow-up program on all students. The maintenance of adequate records to insure rapid retrieval of information was a significant goal of this objective.
    g. To develop a program of orientation for feeder junior high schools serving each comprehensive high school.
2. To develop a cooperative education program designed to give work experience to twelfth grade vocational students and those entering into employment but not having marketable skills.
3. To develop a summer or after-school basic skill program for nonvocational and noncollege-bound students which would equip them with salable skills for entry-level employment.
4. To develop programs which would give employment and future educational direction to the dropout student.

Description of the Component

The senior high school (grades 10, 11, and 12) component was implemented during the 1970-71 project year at Northside High School. This school served a low socioeconomic neighborhood which was predominantly black. During the 1971-72 school year, the high school SPAN program was, in accordance with recommendations from the on-site evaluation of the previous year, expanded to serve students at Westside High School. The rationale for this expansion was "to include a population which will give [SPAN] an image of being a system designed to provide students from all social, racial, and economic backgrounds with the occupational information and exploratory experience necessary to develop mature and realistic concepts of their own interests, abilities, and aptitudes, toward the 'world of work' and the best means by which they can achieve these career goals." Students at Westside High were white and represented low-to-middle income families. The students of both schools comprised the target population for the 1971-72 and 1972-73 project years. Enrollments of the target schools as compared with the total senior high enrollment in the Memphis City schools during the project years are presented in Table IV-1.

TABLE IV-1

ENROLLMENT OF THE TARGET HIGH SCHOOLS COMPARED TO TOTAL SENIOR HIGH ENROLLMENTS DURING THE 1970-1973 PROJECT YEARS

Project Years	Northside High School	Westside High School	Total System	Target Schools As a Percent of Total
1970-71	1,435	---	26,618	5.02%
1971-72	1,345	383	29,244	5.90%
1972-73	1,618	329	28,178	7.26%

The senior high school students in the target population increased from 5.02 percent during the 1970-71 project year to 7.26 percent during the 1972-73 project year. The addition of Westside High School during the last two years was partially responsible for this increase.

Vocational Guidance and Job Placement Centers

The first center became functional at Northside High School during January, 1971. Early emphasis was placed upon gathering base data concerning student needs and backgrounds. Survey sheets were distributed to seniors in an effort to gather data and promote student inquiry into the services offered by the SPAN staff. Due to the problems associated with initiating the program (personnel shortages, locating and equipping offices, making initial contacts with business, and so on), few records exist attesting to the number of inquiries and follow-up counseling sessions held at Northside between January 1, 1971, and May 31, 1971. However, the co-op coordinator estimated that more than 300 counseling sessions were held during that period.

Letters were sent to all graduating seniors in May, 1971, reiterating SPAN's commitment to help graduates and dropouts in the future. This resulted in at least 200 additional counseling and/or contact sessions during the period from June 1, 1971, through August 31, 1971. Since records of contacts and counseling sessions were not available, it was not possible to give an analysis of people served (e.g., student, non-student, graduated student, dropout) during the 1970-71 project year.

Beginning in the 1971-72 project year, centers were in full operation in both Northside and Westside schools. Goals were further clarified for the centers which included: (1) contacting all seniors in both schools in order to acquaint them with basic information about employment opportunities and provide occupational orientation and career guidance; (2) establishing individual remedial counseling and providing mini-courses and "quick-shot" programs for seniors which concentrated on basic job skills and attitudes; (3) bringing vocational-technical recruiters and industrial representatives to the schools to talk with juniors and seniors; and (4) developing a computer-assisted career information (CACI) system. Emphasis on follow-up counseling and monitoring each student's progress during vocational training was stressed. In addition, both centers gathered, sorted, and catalogued a wide variety of vocational educational materials which were available to students, teachers, and guidance counselors. A current bibliography of available literature was produced and distributed regularly.

Other activities of the centers included field trips designed to give students first-hand exposure to the vocational areas for which the SPAN courses and materials were directed.

In an effort to assess the impact of the counseling and vocational guidance centers during the 1971-72 project year, an attempt was made to ascertain the actual number of student contacts made by the counselors. Instructions were given to all counselors and SPAN personnel to fill out a special form (see Appendix D) after the first contact or counseling session with every senior and update the form after every subsequent action or interaction with the student. These forms were also given to counselors at Washington High School (control school) for comparison purposes. A summary of the pertinent data gleaned from these records is presented in Table IV-2

TABLE IV-2

COUNSELOR RECORD ANALYSIS OF SENIOR CONTACTS AT NORTHSIDE, WASHINGTON, AND WESTSIDE DURING THE 1971-72 PROJECT YEAR*

Data Elements	Northside	Westside	Washington (Central)
Total Contacts	608	132	85
Number in in Vocational Program	295	57	11
Number of Conferences Held Regarding Selection of Occupational Fields	383	88	41

*A full disclosure of data presented by these records appear in Table IV-1 of the second year evaluation report.

However, due to the inconsistent recording practices of counselors in each school and between schools, the results could not be used to obtain valid comparisons between schools. Attempts were made to simplify the form, but reports from many counselors indicated that the record-keeping process itself curtailed their efficiency and actually reduced their time spent counseling. For these reasons, the forms to record student counseling contacts were not utilized during the third project year.

A review of the SPAN records indicated that a total of 70 bused field trips were conducted during the last two years of the project. (Table IV-3 summarizes the trips originating from each school classified according to vocational areas during each year.) The number of field trips increased significantly during the last year. Northside field trips increased 312 percent, from 16 to 46. Northside registered an increase from two to six for a 200 percent gain. Many other field trips were also made using private transportation for which no records were kept. No bused field trips were made by Northside during the first project year due to the lack of funds budgeted for this activity during the 1970-71 budget.

TABLE IV-3

FIELD TRIPS FROM HIGH SCHOOLS DURING EACH PROJECT YEAR

	Northside		Westside	
Vocational Areas Visited	1971-72	1972-73	1971-72	1972-73
Industrial and Commercial	4	23	0	5
Educational Institutions	4	16	1	0
Public Services	4	2	1	1
Food and Lodging	2	0	0	0
Medical Facilities	2	5	0	0
TOTAL	16	46	2	6

During the 1972-73 project year, there were 40 mini-courses available to students. Students selected and subsequently received job skill training in 24 areas. At Northside, 19 mini-courses were conducted during the same period. Every senior in both schools received quick-shot training.

The Computer Assisted Career Information (CACI) system began operation in all senior high schools during the fall of 1972. The system held 370 occupational descriptions which were available to students. From its inception through June 14, 1973, there were 17,141 responses to requests for career information produced. Northside students received 678 job descriptions while Westside students requested and received 75. The nine schools in which SPAN or Model Careers teachers were present accounted for 19.4 percent of the CACI utilization.

Retrieval of job information is an integral part of the general concepts of career information. SPAN students have access to Project INFOE, which is a printed materials resource. The system provides information on approximately 400 jobs in the Memphis area, including such facts as entry-level requirements, approximate salaries, and working conditions. The information is stored on microfiche. Students have access to this resource through the use of reader-printers located in SPAN project schools. They may secure printed copies of specific role descriptions contained in the system. No records of actual use by students are available for this report.

Placement statistics of graduating seniors at both senior high schools during the last two project years are presented in Table IV-4. The percentage of graduated students placed increased for each school during the second year (1972-73). Northside registered the greatest increase by the placement of 94.8 percent the second year, as compared with 61.0 percent placement the preceding year. Westside placements increased from 84.8 percent to 96.0 percent.

Cooperative Work-Study Program

During SPAN's first year of operation, implementation of this phase was delayed until mid-term of 1970-71. At that time, Northside was the only high school targeted for the cooperative program. Evaluative recommendations resulted in the addition of Westside High School

TABLE IV-4

PLACEMENTS OF GRADUATED SENIORS FROM NORTHSIDE AND WESTSIDE HIGH SCHOOLS 1972 AND 1973

Status	Northside 1972	Northside 1973	Westside 1972	Westside 1973
College	58	113	24	34
Vocational/Technical Schools	21	63	11	21
Summer Vocational Programs	0	56	0	0
Apprenticeship Programs	0	3	4	8
Military Service	25	23	10	6
Employed Full-Time	103	108	80	50
TOTAL PLACEMENT	207	366	129	119
Unemployed	36	7	6	5
Unable to Follow Up	96	13	17	0
TOTAL GRADUATED	339	386	152	124
PERCENT PLACED	61.0%	94.8%	84.8%	96.0%

during the 1971-72 school year. The reasons for this addition have been discussed in other portions of this document. Northside and Westside High Schools were the locations of efforts to accomplish the goals of the co-op program during the 1972-73 school year.

The same staff has been retained throughout the two and one-half years of operation, encouraging continuity and revision, if needed. Basically, the co-op program seeks to accomplish the following:

1. Identification and provision for needs of individual students relative to part-time employment, fostering retention in school until completion of twelfth grade.
2. Provision for general cooperative training in daily classes, enhancing opportunities for positive interaction between job placement coordinator and students seeking part-time employment.
3. Development and continuous revision of an inventory of available employment sites, attempting to enlist the aid of those in business/industry in dissemination of information about the program.
4. Assessment or monitoring of activities of those students employed part-time to facilitate linkage between school and work.
5. Completion and follow-up studies to determine occupational, educational, and/or training destination of seniors after graduation.

Evaluation efforts to assess this phase of the SPAN Project have utilized both objective data provided by the project director and subjective observations made by staff members of the evaluation team. Over a period of six months, evaluative observations were accomplished in specific situations. These were as follows:

1. Job placement coordinator as classroom instructor in general cooperative training course.
2. Interviews with potential employers for part-time work/study students.

3. Job placement coordinator monitoring activities of students at place of employment.

Probably the most meaningful impression created by each of the job placement coordinators, when observed in many types of situations, was an attitude of positive belief in the worth of the program.

The range of potential sites for part-time employment of students is diverse. Coinciding with the 15 occupational clusters, students work in such places as hospitals, food chain stores, and tractor/farm implement dealerships, to name but a few.

Records of students enrolled in co-op classes and number of these placed in part-time employment provided the summary of data found in Table IV-5. The 100 percent placement record of students in the co-op classes reflects the successful accomplishment of this goal of the SPAN Project. Since this was done for a limited number of students, it would be conjecture to assume equal success with larger numbers. However, the results provide strong support for the inclusion of a program of this type to meet the needs of all students of the local school system.

TABLE IV-5

SENIOR HIGH CO-OP PROGRAM

School and Year	Number Enrolled in Co-op Classes	Placed on Job Number	Placed on Job Percent
Northside 1970-71	27	25	92.6%
Northside 1971-72	25	25	100.0
Northside 1972-73	29	29	100.0
Westside 1971-72	27	27	100.0%
Westside 1972-73	22	22	100.0

Evaluation

The evaulation of the senior high school component was performed both objectively and subjectively. Many of the activities did not lend themselves to a strictly objective analysis, and to have excluded them would have resulted in a shallow and unjust account of Project SPAN at the high school level.

To assess the changes in the vocational preference of students, the Gordon Occupational Checklist (see Appendix C) was chosen. The test was administered each spring as shown in Table IV-6.

TABLE IV-6

ADMINISTRATION OF GORDON OCCUPATIONAL CHECKLIST

School	1971 Juniors	1972 Seniors	1973 Seniors
Northside	369	357	349
Westside	---	105	99
Washington	---	163	166

A comparison between the mean scores of Northside students in each of the individual interest categories over the three-year project period are presented in Table IV-7. The mean scores for each of the interest areas from the test during the first two years revealed little change in occupational interests. Preferences for all areas, except business, lessened. Since the test was administered to juniors in 1971 and to seniors in 1972, the differences may reflect the narrowing of interest by a single group of students during the period of one year. A comparison between the 1972 and 1973 scores, however, indicates a marked difference in the preference between vocational areas. Greater preference for all vocational areas was demonstrated by the 1973 seniors. Since this comparison is between two separate groups, it indicates that the 1973 seniors held a more favorable attitude toward and interest in the vocational areas--especially business, technology, and service--than their 1972 counterparts held.

TABLE IV-7

COMPARISON OF NORTHSIDE STUDENTS' MEAN SCORES ON THE GORDON OCCUPATIONAL CHECKLIST BY OCCUPATIONAL AREA--1971, 1972, AND 1973

Occupational Area	Year 1971	 1972	 1973
Business	10.8	11.6	15.0
Outdoors	1.6	1.1	1.2
Arts	4.1	3.9	4.8
Technology	8.5	7.1	9.3
Service	6.8	6.6	9.6

A comparison beyween the Gordon mean scores and the mean number of occupations listed (students were asked to name all of the occupations they could think of) by seniors at Northside, Washington, and Westside during the 1972 and 1973 testing is presented in Table IV-8. The highest scores were made by students of Northside High School which had the largest number of students. The enrollment was predominantly black. Their higher scores may reflect an increased awareness and interest in occupations resulting from SPAN program involvement.

Westside High School students had lower mean scores which may reflect a narrowing of occupational interest and preparation within the predominantly white student population.

These observations seem to be supported by the mean number of occupations listed by students at each of the schools; Northside students listed more and Westside students less. If, in fact, the former has broadened interest in occupations and the latter has narrowed focus on clusters of occupations, as reflected in their numbers of occupations listed.

TABLE IV-8

MEAN TOTAL GORDON OCCUPATIONAL CHECKLIST SCORES AND MEAN NUMBER OF OCCUPATIONS LISTED BY SENIORS IN THREE HIGH SCHOOLS, 1972 AND 1973

	Mean Scores			Mean Number of Occupations Listed		
School	1972	1973	Difference	1972	1973	Difference
Northside	31.1	39.9	+ 8.8	8.8	29.0	+20.2
Washington*	32.2	25.5	- 6.7	15.8	11.8	- 4.0
Westside	32.6	30.0	- 2.6	27.4	22.6	+ 4.8

*Control School.

The concept of vocational maturity is more comprehensive than vocational choice, including not only the selection of an occupation, but also attitudes toward decision-making, comprehension, and understanding of job requirements, planning activity and ability, and development of vocational capabilities. The Crites' VDI is an attitude scale that was designed to elicit the attitudinal or dispositional response tendencies in vocational maturity which are nonintellectual in nature, but which mediate both choice behaviors and choice aptitudes. (See Appendix E.)

The test is a 50-item scale consisting of statements about an adolescent's (a) involvement in the process of vocational choice, (b) orientation toward the vocational choice problem, (c) independence in decision-making, (d) preferences for factors in vocational choice, and (e) conception of the choice process. The VDI yields a raw score ranging from 0 to 50. The higher the raw score, the greater the vocational maturity level. It has been normalized using a sample of 15,298 students in grades 7-13 from eight states--including Tennessee.

The test was administered as shown in Table IV -9. The mean scores and standard deviations from the VDI for each group at each testing are presented in Table IV-10. A comparison between mean scores of different years at each school revealed that the increase in vocational maturity of the Northside students during their senior year was significant. Comparison between different groups of seniors on a school-by-school basis indicated no significant differences. Only the 1973 Northside seniors registered a lower mean score than the preceding senior class. Comparisons between schools are presented in Table IV-11.

A comparison between the mean scores of seniors at the two SPAN senior highs and the central senior high revealed significant t-values of 3.78 in 1972 and 2.54 in 1973. At both testings, the seniors at Northside and Westside demonstrated a relatively higher maturity value

TABLE IV-9

ADMINISTRATION OF THE VDI

School	1971 Juniors	1972 Seniors	1973 Seniors
Northside	363	357	347
Washington	---	163	170
Westside	---	105	102

TABLE IV-10

RESULTS OF ADMINISTERING CRITES' VOCATIONAL DEVELOPMENT INVENTORY AT NORTHSIDE, WASHINGTON, AND WESTSIDE SENIOR HIGH SCHOOLS, 1971-1973

School and Year	Mean Score	Standard Deviation	t-Value
Northside (same students over two years)			
1971	31.51	5.74	2.06*
1972	32.42	6.15	
Northside			
1972-1973	32.42	6.15	-0.21
1973	32.32	6.47	
Washington			
1972	31.00	5.78	0.96
1973	31.62	6.01	
Westside			
1972	35.12	6.06	0.39
1973	35.48	6.96	
Northside and Westside Combined			
1972	33.03	6.23	0.01
1973	33.04	6.70	

*Significant at the .05 level.

TABLE IV-11

COMPARISON BETWEEN VDI MEAN SCORES OF SENIORS AT SPAN AND CONTROL HIGH SCHOOLS, 1972 AND 1973

School and Year	Mean Score	Standard Deviation	t-Value
1972			
Northside and Westside (combined)	33.03	6.23	-3.78*
Washington	31.00	5.78	
1973			
Northside and Westside (combined)	33.04	6.70	-2.54*
Washington	31.62	6.01	

*Significant at the .05 level.

than their counterparts at Washington. The mean scores of all three high schools remained below the Tennessee mean norm of 35.54, although the Westside seniors in 1973 registered a close 35.48.

Subjective evaluation of employer reaction was obtained as a result of on-site visits to various places of student employment. Of the employers interviewed, none indicated a negative reaction either toward the SPAN Project in general or toward specific students recommended by job placement coordinators.

V. ADMINISTRATIVE COMPONENT

The administrative processes required to carry out the project were satisfactorily undertaken. The SPAN staff maintained a great amount of data regarding their day-to-day operation, but they were not always consistent in the manner in which the information was compiled and reported. The project staff, including the secretaries, were cooperative in every way with the evaluative team and worked hard to supply requested data. Unfortunately, it was not always possible to find complete information in project records. This situation improved somewhat in the final year of the project.

The project director was punctual throughout the project in filing his quarterly reports and regularly furnished copies to his advisory committee, to his staff, and to the evaluation team. The required format used in these reports was consistently valid and the reports were readily understood.

Good rapport was established with the principals of the impact area schools. They were supportive of the program for the most part, and hoped the SPAN project would be continued. The seven principals in the project in its final year were surveyed with a brief instrument toward the end of the 1972-73 year (see Appendix F). Table V-1 reflects the results of this survey. As can be seen from these data, all seven administrators felt that SPAN should be a part of the curriculum and most considered the service to be of great value to students. In addition to the information shown in this table, the survey

TABLE V-1

RESULTS OF PRINCIPAL SURVEY

Survey Questions	Number of Responses
Years school was in SPAN:	
½ year	1
1 year	1
2 years	3
3 years	4
Should SPAN continue?	
Yes	9
Should SPAN be part of the curriculum?	
Yes	7
Was SPAN adequately presented to you?	
Yes	8
No	1
Were SPAN services of value to students?	
Great	[illegible]
Some	[illegible]
Should the school be responsible for providing students with entry-level skills?	
Yes	[illegible]
No	[illegible]
Not sure	[illegible]
Should guidance counselors help get students jobs?	
Yes	[illegible]
No	[illegible]
Not sure	[illegible]
Blank	[illegible]

elicited comments from the administrators concerning difficulties encountered with the project. In one case, expectations were not achieved because of the absence of a project teacher; another experienced frustration because of the change of students during the school year brought about by the desegregation process; and a third expressed a need for better text material for SPAN classes. Four principals, however, reported no difficulties whatever. On the positive side, principals reported that SPAN made children aware of many and varied occupations and vocations; that the free transportation to various businesses and industries was very useful; that films, workshops, and the availability of equipment and material was important; and that the help in getting students jobs in areas of salable skills was outstanding. One principal summed it up for his school with the statement: "SPAN is very much a part of our total school program. It has been very helpful."

A concerted effort was made to inform the public, especially the business community, of Project SPAN and its objectives. This was done by inviting employers and civic groups into the schools to see SPAN in operation, and by talking to civic and professional groups in the city. Information was disseminated to other school systems throughout the project, especially in its third year. (Dissemination activities are discussed in Section VI of this report.)

Staffing was satisfactorily accomplished, despite some difficulties. The greatest problems concerned paraprofessional staffing during the second year of the project. This problem was eliminated during the third year, since paraprofessionals were not used.

The greatest difficulty experienced or observed by the evaluation team revolved around a breakdown in communications during the evaluation phases of both the second and third years of the project. Explicit directions regarding data collection were not always followed, thus compromising some of the assessment procedures. In every case, alternate routes to attain data were attempted with at least partial success.

Overall, the administrative activities were good. Planning and implementing a project of this type is never an easy task, but the SPAN staff were diligent in their pursuit of the project objectives.

VI. DISSEMINATION ACTIVITIES OF PROJECT SPAN

During the third year of Project SPAN activities, a major concern was to demonstrate the efficacy of career education and to disseminate as widely as possible information about the project. Several strategies for dissemination were used.

SPAN Staff Activities and Materials Development and Community Publicity and Documentation

Personnel from Project SPAN and the Memphis City School System developed audiovisual materials to tell the SPAN story. A slide-tape presentation was constructed. Brief descriptive brochures and other published materials (e.g., extra copies of SPAN handbooks and guides) were made ready for distribution. A local television station (WREC-TV, a CBS affiliate) featured a half-hour SPAN program, and a kinescope of the program (16-mm, color, and sound) was put together for use in discussing SPAN and explaining its concepts with other groups. Some of the elementary component kinescopes developed by SPAN staff and WKNO, the Memphis Public Service television station, were identified as appropriate for showing to groups as a demonstration of one of the components of Project SPAN. The elementary section of SPAN that used the 10 15-minute television presentations was available to all viewers who wished to tune in.

Radio station WMPS produced a half-hour feature of Project SPAN. Also, Project SPAN received good coverage in the local newspapers--the *Memphis Commercial Appeal* and the *Press-Scimitar*.

Dissemination Through Professional Publications

Project staff determined that it would be useful to attempt to get as broad dissemination as possible of SPAN activities through various journals. A small contract was let for bid for the development of a variety of magazine and newsletter articles. Articles were submitted under that contract to the following publications and/or associations:

Tennessee Education*
The Education Catalyst*
The AVA Journal
The Bulletin (NASSP)
American Education**
Media and Materials
K-Eight
The Tennessee Teacher*†
School Shop*
Tennessee Vo-Tech News*
Audio-Visual Instruction
Educational Leadership**
Instructor Magazine
Teacher Magazine**
The Catalyst for Change*
Career Education News*
National Elementary Principal (NAESP)
Educational and Industrial Television*

Dissemination at Conferences and Workshops

A third approach at disseminating concepts from Project SPAN included the presentation of SPAN concepts and ideas at various conferences and workshops. Specifically, SPAN staff and/or members of the evaluation staff made presentations to the following groups and/or conferences:

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*Accepted for publication.

**Still out for review at the date of this report.

†Two articles were submitted to this periodical; the briefer of the two was accepted for publication.

The Secondary School Principals, Dallas, 1973*

The American Vocational Association, Chicago, 1973

The American Association of School Administrators, Atlantic City, 1973*

The Association for Supervision and Curriculum Development, Miineapolis, 1973*

The Southern Association of Colleges and Schools, New Orleans, 1972*

The Governor's Conference on Career Education in Tennessee, 1973

The Staff of the U. S. Office of Education, Washington, D. C., April, 1973.*

Additional Coverage

SPAN received additional planned coverage in two ways: (1) listings and descriptions in the formal convention programs (AASA, ASCD, AVA, SACS, NASSP, etc.); and (2) reports from the various conferences. Two such reports initiated numerous inquiries concerning SPAN (Teacher magazine and a "Special Report of NASSP" by the editors of Education, USA).

In summary, it seems that the SPAN Project made a more than adequate attempt at broad scale dissemination of SPAN ideas. The audiovisual materials, the printed materials, the material developed for publication (and some of that which was published), and major presentations at conferences all provide evidence that the SPAN staff in good faith fulfilled its necessary obligation for dissemination of SPAN ideas and activities. The summary of evaluations from some dissemination activities shows that the dissemination activity was well-accepted. The acceptance rate of articles prepared for SPAN shows that adequate coverage of SPAN was obtained in the various journals.

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*These presentations were generally evaluated and a summary tally of the evaluation results appears in Table VI-1.

TABLE VI-1

PARTICIPANT EVALUATION OF SELECTED SPAN DISSEMINATION ACTIVITIES, 1972-73

Rating	SACS 12-12-72		NASSP 2-6-73		AASA 2-26-73		ASCD 3-20-73		USOE 4-30-73		Total	
Area	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Overall Impact*												
1	--	--	--	--	--	--	--	--	--	--	--	--
2	1	7.7	--	--	7	8.8	--	--	--	--	8	5.3
3	--	--	--	--	6	7.5	--	--	--	--	6	4.0
4	1	7.7	8	19.0	26	32.5	1	12.5	1	12.5	37	24.5
5	9	69.2	23	54.8	31	38.7	5	62.5	4	50.0	72	47.6
6	2	15.4	6	14.3	3	3.7	2	25.0	1	12.5	14	9.3
N/A	--	--	5	11.9	7	8.8	--	--	2	25.0	14	9.3
Clarity	Original Questionnaire was expanded after this initial evaluation was completed.											
Poor			--	--	4	5.0	--	--	--	--	4	2.9
Fair			--	--	12	15.0	--	--	2	25.0	14	10.2
Good			42	100.0	64	80.0	8	100.0	6	75.0	120	86.9
N/A			--	--	--	--	--	--	--	--	--	--
Style												
Poor			--	--	1	1.3	--	--	--	--	1	0.7
Fair			2	4.8	30	37.5	1	12.5	2	25.0	35	25.4
Good			40	95.2	49	61.3	7	87.5	6	75.0	102	73.9
N/A												
Amount of Detail												
Poor			--	--	7	8.8	--	--	--	--	7	5.1
Fair			13	31.0	40	50.0	2	25.0	3	37.5	58	42.0
Good			29	69.0	31	38.7	6	75.0	5	62.5	71	51.4
N/A			--	--	2	2.5	--	--	--	--	2	1.5
SPAN Staff Portion												
Poor			--	--	4	5.0	--	--	--	--	4	2.9
Fair			1	2.4	23	28.8	--	--	3	37.5	27	19.6
Good			41	97.6	48	60.0	8	100.0	5	62.5	102	73.9
N/A			--	--	5	6.2	--	--	--	--	5	3.6
Evaluators' Portion												
Poor			--	--	10	12.5	--	--	--	--	10	7.3
Fair			3	7.1	20	25.0	1	12.5	1	12.5	25	18.1
Good			39	92.9	43	53.7	6	75.0	1	12.5	89	64.4
N/A			--	--	7	8.8	1	12.5	6	75.0	14	10.2

*1 = Poor; 6 = Outstanding.

Dissemination activities also included answering inquiries about the project and especially the materials developed by it. During the third year alone at least one inquiry was received from each of the 50 states, as well as from Canada, India, West Germany, and a U. S. Air Force school in Taiwan. Materials were supplied upon request for only the cost of the paper used in duplication. Despite the minimal nature of the charges, nearly $2,600.00 was received by the school system for SPAN materials during 1972-73.

VII. PROJECT SPAN: OVERVIEW AND RECOMMENDATIONS

I. CONTEXT

Memphis, Tennessee, is one of the leading industrial and trade centers of the Mid-South. Its location on the Mississippi River has made it an influential and important city in the United States. Like many urban centers, Memphis has experienced migration by middle class white residents to suburban areas, while blacks of a low socioeconomic level have tended to concentrate in the old inner-city area.

Concern over the high dropout rate in this area and a corresponding lack of job skills among former students caused the Memphis City School System to begin a number of programs designed to improve educational and job opportunities for this segment of the population.

Project SPAN (Start Planning Ahead Now) was funded in 1969 under Part D of Public Law 90-576. The project, designed as an exemplary program, originally was intended to serve approximately 16,500 students in 20 target schools. The group constituted 11.5 percent of the total Memphis City enrollment at the time.

Important external factors affected Project SPAN during its three years of operation. One was decentralization of many administrative functions of the school system. This involved establishment of four area offices instead of one central office which previously had been the site of all administrative functions. The second external factor was court-ordered busing to help achieve better racial balance within the system. The latter occurred in the middle of the 1972-73 academic year.

The total enrollment of the system declined from 150,657 in 1971-72 to 129,523 in 1972-73. The project's target population likewise declined from approximately 16,500 in 1970-71 to 8,022 in 1972-73. Decrease in the target population largely was caused by a decision to reduce the number of elementary schools served from 15 to three.

At the end of the project it was providing direct services to two high schools, four junior high schools, and three elementary schools. These schools had the following enrollments: elementary schools--2,177; junior high schools--3,898; and high schools--1,947.

The project also provided indirect services to a far greater number of elementary school pupils in 1972-73. Study guides for use with the career awareness television programs were provided to all teachers in grades 4-6 in the Memphis City School System. These teachers had an estimated 55,500 pupils.

II. PROGRAM DESCRIPTION

Scope of the Program

Major emphasis of the program was to demonstrate a career education model serving kindergarten through the senior year of high school; to help improve attitudes of pupils toward education, the world of work, and themselves; to lower target schools' dropout rate; and to provide greater job opportunities for both dropouts and graduates of inner-city schools. The program had three major components in keeping with thinking about career education which was current at the time Project SPAN was approved. The elementary school component was designed to promote career awareness among pupils, especially those in intermediate grades. In the junior high school, pupils were encouraged to explore in depth several of the occupational clusters presented to them in elementary school. The senior high school component stressed career focus, including job selection and job placement as well as emergency assistance to students about to quit school.

Personnel

The following personnel were employed by the project at the end of 1972-73: (1) project director; (2) elementary curriculum specialist; (3) four elementary and junior high career education resource teachers; (4) high school job placement coordinator; (5) co-op coordinator; (6) secretary; and (7) clerk-typist.

Procedures

This report covers the three years of Project SPAN from 1970-71 through 1972-73. Services provided in each of the program's three components may be summarized as follows:

Elementary component. Creating awareness of broad career clusters was emphasized through a series of 10 15-minute television programs produced in cooperation with and broadcast by Memphis' public television station. Produced for use with the programs, which were aimed at intermediate grade pupils, was a set of duplicated study guides. These outlined introductory and follow-up activities designed to relate the programs to different classroom content areas, plus psychomotor or hands-on activities in which pupils construct simple objects associated with different jobs. Elementary school teachers also were encouraged to write their own career education units for use with different content areas.

Junior high school component. Emphasis in the career exploration phase of the project was on helping students to define their job interests, to investigate in some detail these interests, to study such job-related activities as applying for a job and writing a resumé, and to receive some work-study experiences. The junior high component utilized a microfiche series giving localized information on 400 specific jobs in Memphis, and a career exploration worktext for use in seventh grade English and social studies classes. Cooperative education classes were begun for overage junior high school students, and approximately 40 Memphis business and industrial firms helped provide job experiences for students.

Senior high school component. As part of its career focus component, Project SPAN employed job placement coordinators to help counselors advise sophomores as to which vocational classes offered by the Memphis City School System would help them realize their tentative career objectives. A computerized job placement and information system was developed for high school students to supplement the microfiche series. Aside from providing career information on request by means of printouts, the computer program also helped the counselors keep abreast of the changing job interests of different pupils. The project assisted high school teachers in developing units of study relating content areas to careers, and mini-courses dealing with job attitudes, basic skills, and other areas of student need were conducted for seniors planning to go to work after graduation. The heart of the high school program was a cooperative work-study program in which more than 90 business and industrial firms participated.

Materials Developed by Project SPAN

The following materials were developed by Project SPAN and made available to nontarget schools in the Memphis City School System and to other systems as well:

1. Film copies of the 10 television program originally recorded on videotape.
2. Teachers' guides for use with all 10 films.
3. A career development worktext for junior high school students.
4. Career education curriculum guides for use in all subject areas in grades seven through nine.
5. Occupational orientation worktext for use in home economics and industrial arts classes.

Budget

The total three-year budget for Project SPAN was approximately $429,000. Because of the changing population in the target schools, it is difficult to arrive at an accurate cost effectiveness figure for the project. The figure should be reasonably low, however, since, in addition to indirect services to the elementary schools, there were a number of similar services provided by Project SPAN to all junior and senior high schools in the Memphis City School System. For example, 1,000 copies of each of the three curriculum guides were distributed to junior high schools. Besides the units developed by teachers and distributed earlier in the project, SPAN's staff developed 40 units for elementary schools and 30 units for junior high schools during the summer of 1973. These units, which linked the study of careers to various content areas, were to be distributed throughout the entire system.

III. EVALUATION

Each of the three project components had its own objectives. Goals for the entire project also were identified. They were as follows:

1. To develop a comprehensive and continuing program of occupational guidance information and techniques which will, in all grades of school, insure that the maximum number of students in need of vocational training will enroll in such programs and that they will be helpful to bridge the gap between going to school and earning a living.

2. To develop a series of "hands on" and soft education units which will insure maximum relevance of education and skills for entering into employment.

3. To develop within the student a desire to stay in school and obtain a general education and skills for entering into employment.

4. To develop within the student the ability to appraise his occupational goals in a manner equal to his abilities, desires, and the forecasted needs of industry.

5. To develop an overall program of positive relationships with community, parents, consultants, and volunteer workers which will give students an enriched outlook on the world of work.

6. To develop all programs so the following characteristics prevail:

    a. Student develops self-understanding and self-awareness.

    b. Student recognizes and makes fuller use of his capabilities.

    c. Student develops positive adjustment to school, community, and home environments.

    d. Student develops self-confidence and self-esteem.

    e. Student develops the ability to make wise decisions.

7. To develop a series of personal inventories which, when given at grades 6, 9, and 12, will indicate realistic soundness of vocational choices.

8. To develop a complete follow-up study which will test the relevance of the total project.

Objectives for all three components stressed program inputs rather than outcomes. That is, the objectives were open rather than closed, in terms of activities and programs to be developed rather than performances to be achieved. The first year's evaluation report was mainly process oriented, suggesting adjustments and refinements that could be made in order to improve project efficiency and the quality of the services. This process evaluation was continued in part in the second year's evaluation, with a major recommendation being that the target schools of the elementary component be cut from 15 to three so that the project could provide full-time resource teachers in each demonstration school. The second year's report also contained a completed evaluation of the 10 television programs developed as part of the elementary component. These were rated on the basis of standards for such films as set down by the National Vocational Guidance Association and on the technical quality of the programs.

A panel of outside evaluators rated the programs highly in both of the above-mentioned areas. The elementary component was judged to have achieved related objectives for developing duplicated materials and psychomotor or hands-on activities for use in the classroom with the TV series. The elementary component's objective of increasing teacher sensitivity also was judged to have been achieved, with inservice workshops seen as a primary method of increasing said sensitivity.

The major purposes of the SPAN activity at the junior high level were to increase students' awareness of the diversity of available career opportunities and to promote a positive attitude toward the world of work. The overall objectives of the project were met at a reasonable level as youngsters at the junior high level became much more aware of the world of work around them.

At the senior high target schools, the vocational guidance and counseling centers have been successful in meeting the objectives of the project relative to providing a cooperative work-study program as well as providing pertinent occupational information through CACI and INFOE. The quick-shot and mini-courses offered seniors needed assistance in preparation for employment.

One of the most significant ways to assess Project SPAN's effectiveness is to note plans for its 1973-74 continuation in the Memphis City School System through local funding. All of the essential services of SPAN will be continued through local funding and actually will be made available to more students. A fourth resource teacher for elementary schools will be added, with one resource teacher operating on an itinerant basis from each of the four area administrative offices. The project also plans extensive staff development activities for next year. This will be a continuation of inservice provided by SPAN in 1972-73 to such professionals as elementary school counselors and consultants. (Consultant is an administrative staff position in the Memphis City School System; there are four such positions assigned to each area office.)

Services initiated by Project SPAN are expected to tie in well with a statewide vocational education program now in the planning stage and expected to be implemented in 1974 by the Tennessee General Assembly.

The legitimacy and value of the project's objectives were also assessed in the final evaluation report. These were judged to have been appropriate considering the context in which the program operated and the identified needs of the students served.

IV. RECOMMENDATIONS

Since the final evaluation of an exemplary project such as SPAN should deal with its implications for those interested in recycling a program, and since the Memphis City system already has plans for continuing and expanding SPAN's services, the following recommendations are made for other systems considering career education programs. The recommendations grow out of the evaluation of Project SPAN.

1. Career education should be used as one way to make classroom instruction more relevant to the careers and related activities, such as writing personal resumes and preparing for job interviews.

2. All grades should be involved in a career education program, and activities should progress in a logical sequence from students' career awareness to career exploration to career focus.

3. Adequate consultative and resource assistance should be made available over an extended period of time to help teachers and counselors to implement a career education program.

4. Systems should utilize personnel, experiences, and materials of present and past exemplary programs, such as SPAN.

5. Cooperative work-study programs and job counseling and placement services should be essential parts of career education efforts.

6. New career education programs should be piloted in a few schools, problems identified, and procedures refined before being diffused through an entire system.

7. Specific process and product objectives should be drawn up for a proposed career education, based on identified needs of students. Program procedures should be planned in accordance with these objectives.

8. A new program should be evaluated by outside agencies, especially during the pilot phase.

9. Career education should be used as a means of increasing community involvement in the schools, through such activities as cooperative work-study programs, school job placement programs, field trips to community businesses and industries, and invitations for school speaking engagements to community resource persons.

APPENDICES

APPENDIX A

OCCUPATIONAL SENSITIVITY QUESTIONNAIRE AND RESULTS

Dear Teacher:

Please complete this brief questionnaire to the best of your knowledge. We are seeking information which will be helpful in evaluating Project SPAN. Please be honest and frank in your responses. You need not identify yourself or your school.

1. What grade level do you teach?

   _____

2. How many pupils are in your class?

   _____

3. Is your classroom self-contained?

   _____Yes _____No

4. If not, do you have access to a TV set to use in watching SPAN films telecast by WKNO?

   _____Yes _____No

5. How many of the SPAN films have your pupils seen this year?

   _____None _____1-3 _____4-6 _____7-10

6. In your opinion, have the SPAN films been telecast at convenient times for you to use in connection with classroom teaching?

   _____Yes _____No

7. How much time have you been able to devote each week, on the average, to preparing your pupils to view each film?

   _____Not applicable; did not see the films.
   _____Fewer than 30 minutes
   _____30 to 60 minutes
   _____More than 60 minutes

8. How much time have you been able to devote each week, on the average, to follow-up discussions of SPAN films?

   _____Not applicable
   _____Fewer than 30 minutes
   _____30 to 60 minutes
   _____More than 60 minutes

9. How much time have you been able to devote, on the average, to use of printed materials furnished by Project SPAN?

   _____Not applicable
   _____Fewer than 30 minutes
   _____30 to 60 minutes
   _____More than 60 minutes

10. If you have not been able to see see some telecasts of SPAN programs, have you been able to use a school projector to show film copies of the SPAN telecasts in your classroom?

    _____Yes _____No

11. If "yes," how many kinescopes of SPAN films have you shown in your classroom?

    _____1-3 _____4-6 _____7-10

12. If your pupils met the SPAN teacher in another room, did you regularly accompany them and remain with them during the teacher's presentation?

    _____Yes _____No

13. If the SPAN teacher worked with your pupils in your classroom, did you regularly remain in the classroom during the teacher's presentation?

    _____Yes _____No

14. How would you rate the effectiveness of the SPAN teacher in working with your pupils to disseminate career information?

    _____Ineffective
    _____Fairly effective
    _____Very effective

15. Do you feel that your principal is knowledgeable about and supportive of the goals and activities of the SPAN program?

    _____Yes _____No

16. Please make any comments you have concerning this questionnaire on the back side.

1972--THREE GROUPS 1973--SPAN TEACHERS ONLY

1. How rewarding, psychologically, do you think is work in manufacturing occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Rewarding								Greatly Rewarding	

Group	Mean Rating	Group	Mean
Workshop Participants (N=21)	7.9	Elementary (N=37)	6.6
SPAN Teachers (N=61) (Elementary)	6.0	Junior High (N=70)	5.8
Control Group (N=26) (Elementary)	5.8	Senior High (N=43)	5.8

2. What level of preparation and training do you think is needed by those working in consumer and homemaking-related occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No training Needed							Extensive training Needed		

Group	Mean Rating	Group	Mean
Workshop Participants	6.6	Elementary	6.8
SPAN Teachers	6.8	Junior High	7.3
Control Group	7.3	Senior High	7.1

3. To what degree are there opportunities for advancement in general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No Opportunities								A great many Opportunities	

Group	Mean Rating	Group	Mean
Workshop Participants	8.2	Elementary	6.3
SPAN Teachers	6.2	Junior High	6.5
Control Group	6.3	Senior High	6.4

4. To your knowledge, are there other occupations which are related to general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No Opportunities								A great many Opportunities	

Group	Mean Rating	Group	Mean
Workshop Participants	7.9	Elementary	6.0
SPAN Teachers	5.8	Junior High	6.7
Control Group	6.1	Senior High	6.5

5. How many different occupational activities are available to those working in marketing and distribution occupations? How many different kinds of work are available in this occupational field?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Very limited Number — Very large Number

Group	Mean Rating
Workshop Participants	9.4
SPAN Teachers	6.8
Control Group	6.4

Group	Mean
Elementary	6.8
Junior High	7.4
Senior High	7.7

6. To what degree is excellence of workmanship important in general and personal services occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Not Important — Extremely Important

Group	Mean Rating
Workshop Participants	8.0
SPAN Teachers	7.5
Control Group	8.0

Group	Mean
Elementary	7.6
Junior High	8.4
Senior High	8.8

7. How strongly would you urge your pupils to enter manufacturing occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Would not Recommend — Strongest possible Recommendations

Group	Mean Rating
Workshop Participants	6.9
SPAN Teachers	6.4
Control Groups	6.4

Group	Mean
Elementary	6.9
Junior High	6.3
Senior High	6.6

8. As compared with your profession, teaching, how important is distributive occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Lesser Importance — Greater Importance

Group	Mean Rating
Workshop Participants	7.6
SPAN Teachers	6.4
Control Group	6.9

Group	Mean
Elementary	6.7
Junior High	6.7
Senior High	6.8

9. To what degree can material presented in the elementary grades help make pupils aware of the requirements and rewards of the consumer and homemaking-related occupations field?

Rating Scale
1 2 3 4 5 6 7 8 9 10
To a very Limited degree — To a very Extensive degree

Group	Mean Rating	Group	Mean
Workshop Participants	8.9	Elementary	7.4
SPAN Teachers	7.0	Junior High	6.9
Control Group	5.7	Senior High	7.3

10. To what degree do you feel that you are knowledgeable about marketing and distribution occupations?

Rating Scale
1 2 3 4 5 6 7 8 9 10
To a very Limited degree — To a very Extensive degree

Group	Mean Rating	Group	Mean
Workshop Participants	6.8	Elementary	5.9
SPAN Teachers	4.6	Junior High	5.7
Control Group	4.3	Senior High	5.9

11. How important do you think it is for you to be knowledgeable about the general and personal services occupational field, as such knowledge relates to your work as an elementary school teacher?

Rating Scale
1 2 3 4 5 6 7 8 9 10
Slightly Important — Extremely Important

Group	Mean Rating	Group	Mean
Workshop Participants	8.9	Elementary	7.6
SPAN Teachers	7.3	Junior High	7.3
Control Group	7.7	Senior High	6.7

12. As compared with college study, how important is post-secondary training in manufacturing occupations?

Rating Scale
1 2 3 4 5 6 7 8 9 10
Lesser Importance — Greater Importance

Group	Mean Rating	Group	Mean
Workshop Participants	7.3	Elementary	6.6
SPAN Teachers	6.6	Junior High	7.1
Control Group	6.7	Senior High	7.0

13. In your opinion, how important is a college education in today's society?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Slightly Important ... Extremely Important

Group	Mean Rating
Workshop Participants	5.9
SPAN Teachers	8.2
Control Group	8.5

Group	Mean
Elementary	8.0
Junior High	7.9
Senior High	7.6

14. Please rate the contributions which you feel persons in each of the following career fields makes to society.

Marketing

1 2 3 4 5 6 7 8 9 10

Slight Contribution ... Great Contribution

Group	Mean Rating
Workshop Participants	8.5
SPAN Teachers	8.1
Control Group	8.0

Group	Mean
Elementary	7.5
Junior High	7.9
Senior High	7.9

Medicine

1 2 3 4 5 6 7 8 9 10

Slight Contribution ... Great Contribution

Group	Mean Rating
Workshop Participants	9.4
SPAN Teachers	9.2
Control Group	9.7

Group	Mean
Elementary	8.4
Junior High	9.2
Senior High	9.2

Manufacturing

1 2 3 4 5 6 7 8 9 10

Slight Contribution ... Great Contribution

Group	Mean Rating
Wokshop Participants	8.7
SPAN Teachers	8.4
Control Group	8.6

Group	Mean
Elementary	7.9
Junior High	8.3
Senior High	8.1

Teaching

1 2 3 4 5 6 7 8 9 10

Slight Contribution ... Great Contribution

Group	Mean Rating
Workshop Participants	9.1
SPAN Teachers	8.4
Control Group	9.6

Group	Mean
Elementary	8.4
Junior High	9.0
Senior High	8.9

Construction

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	8.7	Elementary	8.2
SPAN Teachers	8.0	Junior High	8.4
Control Group	8.7	Senior High	8.0

Office Occupations

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	8.3	Elementary	7.2
SPAN Teachers	7.8	Junior High	7.4
Control Group	8.0	Senior High	7.4

Practice of Law

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	7.9	Elementary	8.2
SPAN Teachers	8.1	Junior High	8.2
Control Group	9.0	Senior High	7.7

Homemaking-Related Occupations

1 2 3 4 5 6 7 8 9 10

Slight Contribution — Great Contribution

Group	Mean Rating	Group	Mean
Workshop Participants	8.3	Elementary	7.9
SPAN Teachers	7.5	Junior High	8.3
Control Group	8.5	Senior High	8.3

15. How strongly would you encourage your pupils to enter construction occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Would not Encourage — Encourage Very strongly

Group	Mean Rating	Group	Mean
Workshop Participants	7.7	Elementary	7.9
SPAN Teachers	7.2	Junior High	7.3
Control Group	7.2	Senior High	6.7

16. To what degree is excellence of workmanship important in consumer and homemaking-related occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Important								Extremely Important	

Group	Mean Rating
Workshop Participants	8.3
SPAN Teachers	7.5
Control Group	8.0

Group	Mean
Elementary	8.1
Junior High	7.9
Senior High	8.0

17. How rewarding, psychologically speaking, do you think work is in the transportation occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Not Rewarding								Greatly Rewarding	

Group	Mean Rating
Workshop Participants	8.3
SPAN Teachers	6.9
Control Group	7.0

Group	Mean
Elementary	7.7
Junior High	6.8
Senior High	6.4

18. To what degree do you feel that you are knowledgeable about general and personal services occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
To a very Limited degree								To a very Extensive degree	

Group	Mean Rating
Workshop Participants	7.5
SPAN Teachers	5.5
Control Group	5.5

Group	Mean
Elementary	7.2
Junior High	6.1
Senior High	5.8

19. To what degree are there opportunities for advancement in the manufacturing occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
No Opportunities								A great many Opportunities	

Group	Mean Rating
Workshop Participants	7.6
SPAN Teachers	6.2
Control Group	6.8

Group	Mean
Elementary	7.3
Junior High	6.9
Senior High	6.7

20. What level of preparation and training do you think is needed by those working in contruction occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

No training Needed — Extensive training Needed

Group	Mean Rating
Workshop Participants	6.7
SPAN Teachers	6.9
Control Group	7.0

Group	Mean
Elementary	7.3
Junior High	7.1
Senior High	6.3

21. To what degree are the opportunities for advancement in business and office Occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

No Opportunities — A great many Opportunities

Group	Mean Rating
Workshop Participants	7.6
SPAN Teachers	6.7
Control Group	7.5

Group	Mean
Elementary	7.7
Junior High	7.2
Senior High	6.8

22. As compared with college study, how important is post-secondary training in consumer and homemaking-related occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Lesser Importance — Greater Importance

Group	Mean Rating
Workshop Participants	7.0
SPAN Teachers	6.6
Control Group	6.8

Group	Mean
Elementary	7.4
Junior High	7.2
Senior High	7.4

23. How strongly would you urge your pupils to enter communications and media occupations?

Rating Scale

1 2 3 4 5 6 7 8 9 10

Would not Recommend — Strongest possible Recommendation

Group	Mean Rating
Workshop Participants	7.8
SPAN Teachers	7.1
Control Group	7.6

Group	Mean
Elementary	8.0
Junior High	7.8
Senior High	7.7

24. How strongly would you urge your pupils to enter consumer and homemaking-related occupations?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Would not Recommend							Strongest possible Recommendation		

Group	Mean Rating	Group	Mean
Workshop Participants	7.2	Elementary	7.3
SPAN Teachers	6.9	Junior High	7.3
Control Group	7.1	Senior High	7.3

25. How valuable, in your opinion, is Project SPAN in heightening vocational awareness among pupils?

Rating Scale

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating	Group	Mean
Workshop Participants	9.7	Elementary	6.1
SPAN Teachers	7.8	Junior High	7.9
Control Group	7.5	Senior High	8.5

26. Please rate the value of SPAN films in your instructional program. Omit this question if you have no knowledge of the films.

Rating Scale

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating	Group	Mean
Workshop Participants	9.5	Elementary	8.0
SPAN Teachers	7.2	Junior High	9.2
Control Group	6.8	Senior High	N/A

27. Please rate what you consider to be the value to pupils of classroom instruction in each of the following areas.

English Grammar

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating	Group	Mean
Workshop Participants	8.7	Elementary	8.7
SPAN Teachers	8.7	Junior High	8.9
Control Group	8.3	Senior High	8.2

Mathematics

1 2 3 4 5 6 7 8 9 10

Of no Value — Of great Value

Group	Mean Rating
Workshop participants	8.8
SPAN Teachers	8.9
Control Group	9.0

Group	Mean
Elementary	9.1
Junior High	9.0
Senior High	8.4

Construction Occupations

1 2 3 4 5 6 7 8 9 10

Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	7.5
SPAN Teachers	6.8
Control Group	6.6

Group	Mean
Elementary	8.1
Junior High	7.5
Senior High	6.9

Science

1 2 3 4 5 6 7 8 9 10

Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	7.4
SPAN Teachers	7.6
Control Group	7.6

Group	Mean
Elementary	8.3
Junior High	7.5
Senior High	7.5

Manufacturing Occupations

1 2 3 4 5 6 7 8 9 10

Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	6.7
SPAN Teachers	7.1
Control Group	7.0

Group	Mean
Elementary	7.8
Junior High	7.4
Senior High	7.1

Social Studies

1 2 3 4 5 6 7 8 9 10

Of no Value — Of great Value

Group	Mean Rating
Workshop Participants	7.5
SPAN Teachers	7.5
Control Group	7.4

Group	Mean
Elementary	8.1
Junior High	7.6
Senior High	7.0

Transportation Occupations

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	7.4
SPAN Teachers	6.9
Control Group	6.6

Group	Mean
Elementary	7.8
Junior High	7.3
Senior High	6.6

Consumer and Homemaker-Related Occupations

1	2	3	4	5	6	7	8	9	10
Of no Value								Of great Value	

Group	Mean Rating
Workshop Participants	8.4
SPAN Teachers	7.2
Control Group	7.4

Group	Mean
Elementary	7.6
Junior High	7.4
Senior High	7.5

28. Please rank each of the following instructional areas in what you consider to be their order of importance in the elementary school curriculum. Rank the most important "1", the second most important "2", and so on through "8". Do not indicate ties. Mark your ranking in the blank to the left of each item.

_______English Grammar

_______Construction Occupationa

_______Consumer and Homemaker-Related Occupations

_______Manufacturing

_________Mathematics

_________Transportation Occupations

_________Science

_________Social Studies

Modal Rankings

Instructional Area	Workshop Participants	SPAN Teachers	Control Group
English Grammar	1	1	1
Construction Occupations	5	6	7
Consumer-Homemaker Occupations	1,7	7	5
Manufacturing	8	6	6
Mathematics	1,2	2	1
Transportation Occupations	6	8	8
Science	4	4	4
Social Studies	3	3	4

APPENDIX B

REVISED WESTBROOK OCCUPATIONAL MATURITY SCALE

TEST 1

1. Mike had some job training in high school and worked hard to graduate. He is strong, dependable and cheerful. He is good at doing things with his hands, and he likes to work outside. Mike likes other people. Now he has one of these jobs. Which job do you think he has?

   A. Payroll clerk
   B. Truck driver
   C. Brick mason
   D. Night watchman
   E. I don't know

2. Which job requires the LEAST education?

   A. Typist
   B. Instrument maker
   C. Wrapper
   D. Advertising copywriter
   E. I don't know

3. Which one carries luggage in a hotel?

   A. Usher
   B. Waiter
   C. Caretaker
   D. Porter
   E. I don't know

4. Bill likes people and has always been interested in the lives and customs of others. He is friendly and outgoing, but also a good listener. He did well in history and other social science courses in high school and studied sociology in college. He joined the Peace Corps after graduation, before settling down in a particular job. He is now in one of the following occupations. Which one seems to you to be the most likely one for him to be in?

   A. College professor
   B. Playground director
   C. Social caseworker
   D. Town manager
   E. I don't know

5. When Tom was a boy, he had pets of many kinds. He always showed love and understanding for animals. In high school he did his best work in chemistry and biology. Tom stays in good shape because he enjoys outdoor activities at all times of the year. In college he studied the physical and biological sciences. After graduation he went on for the special training required for his chosen field. He is now in one of the following jobs. Which one do you think it is?

   A. Animal trainer
   B. Veterinarian
   C. Hunting guide
   D. Jockey
   E. I don't know

6. Which job is NOT in the field of PHARMACOLOGY?

   A. Compositor
   B. Bacteriologist
   C. Biologist
   D. Chemist
   E. I don't know

7. Which job does NOT require special schooling?

   A. Cab driver
   B. Nurse
   C. Computer programmer
   D. Barber
   E. I don't know

8. An OPTOMETRIST:

   A. Treats diseases of the mind.
   B. Helps people improve their sight.
   C. Provides information on use of drugs.
   D. Treats bone diseases.
   E. I don't know

9. Which one usually makes the MOST money?

   A. Fireman
   B. Chemist
   C. Typist
   D. Nurse
   E. Butcher

10. Imagination is most important in which job?

    A. Advertising artist
    B. Electrician
    C. Social worker
    D. Librarian
    E. I don't know

11. Which of the following works late at night most often?

    A. Bank clerk
    B. School teacher
    C. Barber
    D. Newspaper printer
    E. Auto mechanic

12. Mary graduated from a high school where she took several business courses. Mary was not good in English, but her favorite activity was the Dramatic Club. She is a cool and alert girl, and she likes to be with other people. Now she has one of the following jobs. Which job do you think it is?

    A. Mail clerk
    B. Receptionist
    C. Stenographer
    D. Secretary
    E. I don't know

13. What kind of work is usually done by a VETERINARIAN?

    A. Sells feed and grain
    B. Repairs farm machinery
    C. Works with retired soldiers
    D. Takes care of animals
    E. I don't know

14. In the Army Joe was a paratrooper. In which job can he use this training?

    A. Air Freight delivery
    B. Forest fire fighter
    C. Truck driver
    D. Lumberjack
    E. I don't know

15. Which job does NOT require a college education?

    A. Choreographer
    B. Physicist
    C. Mathematician
    D. Psychiatrist
    E. I don't know

16. Which job is NOT in the field of EDUCATION?

    A. Teacher
    B. Lawyer
    C. Counselor
    D. Principal
    E. I don't know

17. Interest in reading and studying is most helpful in which job?

    A. Historian
    B. Dressmaker
    C. Legal clerk
    D. Typesetter
    E. I don't know

18. An AVIATOR:

    A. Fixes equipment on an airplane
    B. Checks on the operation of equipment on an airplane
    C. Tells people what time the planes leave
    D. Designs and builds airplanes
    E. I don't know

19. Which one puts business papers in the right places?

    A. Office boy
    B. File clerk
    C. Secretary
    D. Typist
    E. I don't know

20. Tom likes to draw, and he is good at it. In high school his favorite subjects were math and science. He made his lowest grades in English. After he joined the Art Club, he had his drawings and pictures in several shows. Tom is shy around people; he likes to do things alone or with one or two others. After high school, he went to a technical school. Which job do you think he has now?

    A. Stage set designer
    B. Plumber
    C. Children's book illustrator
    D. Engineer
    E. I don't know

TEST 2

1. Which of the following spends the LEAST amount of time outdoors?

   A. Athlete
   B. Teacher
   C. Farmer
   D. Mailman
   E. I don't know

2. Which one would help people in making arrangements for an out-of-town trip?

   A. Airline stewardess
   B. Travel agent
   C. Porter
   D. Usher
   E. I don't know

3. An INSURANCE AGENT:

   A. Sells policies which protect against losses.
   B. Sells houses and land.
   C. Gets loans for repair of damaged property.
   D. Reviews policy applications to see how risky they are.
   E. I don't know.

4. What kind of work is usually done by an ACCOUNTANT?

   A. Collects money for bills
   B. Sells stocks and bonds
   C. Keeps business records
   D. Writes descriptions of accidents
   E. I don't know

5. What does a NURSERYMAN do?

   A. Grows tobacco
   B. Grows vegetables
   C. Manages a kindergarten
   D. Grows flowers
   E. I don't know

6. Which one makes metal printing plates?

   A. Engraver
   B. Assembler
   C. Electronic technician
   D. Engineering technician
   E. I don't know

7. Bob, a cooperative and smart boy, was well-liked by other students. He made very good grades in all subjects. Although he liked young people, he did not want to teach. His friends always found it easy to talk to him. They were not surprised when he went to a School of Social Work after high school. After he got his college degree, he did more school work to be certified for his chosen field of work. Which job do you think he has?

   A. YMCA director
   B. School counselor
   C. Police chief
   D. Minister
   E. I don't know

8. Which one designs buildings?

   A. Mechanic
   B. Architect
   C. Surveyor
   D. Engineer
   E. I don't know

9. Which job does NOT require special schooling?

   A. Cashier
   B. Nurse
   C. Barber
   D. Stewardess
   E. I don't know

10. A LANDSCAPE ARCHITECT:

   A. Raises and sells plants and shrubs.
   B. Plans and designs the outside of a building.
   C. Draws city zoning maps.
   D. Plans and designs outdoor areas.
   E. I don't know.

11. Knowing how to fix things is most important in which job?

   A. Typist
   B. Paper hanger
   C. Electrician
   D. Hairdresser
   E. I don't know

12. Alice is a very lively, friendly girl. In high school she took part in all sports activities. In college she studied physical education. She likes working with people. She is considered dependable by other students. In college Alice was elected to several important student offices. Which job do you think she has now?

    A. High school physical education teacher
    B. Social worker
    C. Medical technician
    D. Navy nurse
    E. I don't know

13. An ASTRONOMER:

    A. Studies the stars of the universe.
    B. Studies the forms of energy and matter.
    C. Predicts the future from the stars.
    D. Makes rings, pins, and other jewelry by hand.
    E. I don't know

14. Creativity is necessary in which job?

    A. Architect
    B. Home economist
    C. Accountant
    D. Statistician
    E. I don't know

15. Which one seats people in a theater or auditorium?

    A. Usher
    B. Waiter
    C. Porter
    D. Stewardess
    E. I don't know

16. Ed worked hard to get through high school where he took some business courses, but he wanted a job that would keep him out-of-doors. Tests showed that he didn't have much mechanical aptitude. He has an easy-going personality and excellent health. He has always liked to do things where he wouldn't be around too many people. He is now in one of the following jobs. Which one do you think he is in?

    A. Bus driver
    B. Construction foreman
    C. Mail carrier
    D. Auto repairman
    E. I don't know

17. Which job requires the LEAST education?

    A. Licensed practical nurse
    B. Registered nurse
    C. Electrical engineer
    D. Dentist
    E. I don't know

18. Which one does the LEAST amount of walking?

    A. Milkman
    B. Craneman
    C. Mailman
    D. Policeman
    E. I don't know

19. Which one usually makes the MOST money?

    A. Optometrist
    B. Office equipment serviceman
    C. Gardener
    D. Construction worker
    E. Mail carrier

20. Bill dropped out of high school. He worked as a mechanic's helper before he decided to go back to night school for his diploma. He likes to be around people and has a cheerful personality. He tinkers on cars a lot, and likes to travel around to see different places. He is a dependable person and level-headed in emergencies. He is now in one of the following jobs. Which job do you think he has?

    A. Garage mechanic
    B. Policeman
    C. Interstate bus driver
    D. Automobile assemblyline worker
    E. I don't know

TEST 3

1. As Phil grew up in the country, he was always watching things grow. He liked to be out-of-doors. He was happiest when he could hunt or fish by himself or with a friend. He did average work in high school and then went to an agricultural college for two years. He is quiet, easygoing, and patient. He is not very good at doing things with his hands. He is now in one of the following jobs. Which job do you think he has?

   A. Soil chemist
   B. Tractor salesman
   C. Greenhouse and nursery operator
   D. Foreman in tomato packinghouse
   E. I don't know

2. Which job requires the LEAST training?

   A. Astronaut
   B. Telephone operator
   C. Doctor
   D. Hair stylist
   E. I don't know

3. The ability to speak and debate is necessary for which job?

   A. Concert singer
   B. Policeman
   C. Cab driver
   D. Lawyer
   E. I don't know

4. Which one fills prescriptions for drugs and medicines?

   A. Chemist
   B. Physicist
   C. Pharmacist
   D. Pharmacologist
   E. I don't know

5. Which job is in the area of OCEANOGRAPHY?

   A. Marine geologist
   B. Botanist
   C. Anthropologist
   D. Archeologist
   E. I don't know

6. Which of these works under the most dangerous conditions?

   A. Gardener
   B. Librarian
   C. Messenger boy
   D. Policeman
   E. Butcher

7. Harry is good at doing things with his hands and is good in art. In high school he made average grades. After high school he went to a technical school for two years to take commercial art. Harry has a way of talking that makes people comfortable. He also has good business sense. When he was a child, photography was his hobby. What job do you think he has now?

   A. Art museum director
   B. Commercial photographer
   C. Surveyor
   D. Historian
   E. I don't know

8. Which job is NOT in the field of ENTERTAINMENT?

   A. Musician
   B. Therapist
   C. Choreographer
   D. Acrobat
   E. I don't know

9. A college education is NOT required to be a:

   A. Chemist
   B. Doctor
   C. Architect
   D. Carpenter
   E. I don't know

10. Being strong is necessary in which job?

   A. Lumberjack
   B. Heavy equipment operator
   C. Messenger boy
   D. Butcher
   E. I don't know

11. Which one usually makes the MOST money?

   A. Tool maker
   B. Fisherman
   C. Personnel worker
   D. Chemical engineer
   E. Auto mechanic

12. A college education is usually needed to be a?

    A. Receptionist
    B. Geologist
    C. Actress
    D. Copywriter
    E. I don't know

13. Which job is in the area of LAW ENFORCEMENT?

    A. Accountant
    B. Stockbroker
    C. Firefighter
    D. Judge
    E. I don't know

14. Which one usually makes the MOST money?

    A. Architect
    B. Teacher
    C. Forester
    D. Toolmaker
    E. Brickmason

15. Practice fixing meals is most useful for which job?

    A. Waiter
    B. Dishwasher
    C. Dietician
    D. Bartender
    E. I don't know

16. Which job requires the MOST education?

    A. Barber
    B. Mechanic
    C. Laboratory technician
    D. Secretary
    E. I don't know

17. A Certified Public Accountant

    A. Decides what to sell.
    B. Locates and hires workers.
    C. Builds up the public ideas of a business.
    D. Figures out and studies business records.
    E. I don't know

18. A college education is NOT required to be a:

    A. Chemist
    B. Architect
    C. Mechanic
    D. Agronomist
    E. I don't know

19. Which job requires a college degree?

    A. Oilwell driller
    B. Window decorator
    C. Policeman
    D. Landscape architect
    E. I don't know

20. Which job is NOT in the HOTEL INDUSTRY?

    A. Surveyor
    B. Caterer
    C. Bellboy
    D. Cashier
    E. I don't know

TEST 4

1. In high school John did well in mathematics and science. He is a neat person who keeps everything in the right place. He is a good manager. He was elected president of several high school and college organizations. He had part-time summer jobs in a hospital laboratory. John always hoped that someday he could manage a business of his own. John had to graduate from a special kind of college to get ready for his job. He also had to get a state license to practice it. Which job do you think John has?

   A. Accountant
   B. Pharmacist
   C. Pilot
   D. Lawyer
   E. I don't know

2. Which job takes the LEAST training?

   A. Secretary
   B. Carpenter
   C. Mailman
   D. Hair stylist
   E. I don't know

3. Which job is NOT in the field of agriculture?

   A. Laborer
   B. Farmer
   C. Conservationist
   D. Physician
   E. I don't know

4. Which one works outdoors most often?

   A. Dressmaker
   B. Cashier
   C. Ski instructor
   D. Cook
   E. Window Decorator

5. Which job is NOT in the field of OFFICE WORK?

   A. Stenographer
   B. Accountant
   C. Bookkeeper
   D. Photographer
   E. I don't know

6. Interest in the way people act with each other is necessary for which job?

   A. Mechanical engineer
   B. Psychotherapist
   C. Computer programmer
   D. Concert singer
   E. I don't know

7. Which job is most likely to be learned through on-the-job training?

   A. Civil engineer
   B. Printing press operator
   C. Architect
   D. Pharmacist
   E. I don't know

8. Experience in 4-H Clubs is most helpful for which job?

   A. Lumberjack
   B. Fisherman
   C. Sales clerk
   D. Farmer
   E. I don't know

9. Which job is NOT in the field of HEALTH?

   A. Therapist
   B. Physician
   C. Choreographer
   D. Nurse
   E. I don't know

10. Which one works at home most frequently?

   A. Author
   B. Industrial engineer
   C. Surveyor
   D. Poll interviewer
   E. Longshoreman

11. Which one usually makes the MOST money?

   A. Farmer
   B. Dentist
   C. Mail carrier
   D. Salesman
   E. Nurse

12. Interests in sports are necessary for which job?

    A. Anthropologist
    B. Forester
    C. Fisherman
    D. Athletic director
    E. I don't know

13. Which one is away from home most often?

    A. Farmer
    B. Teacher
    C. Commercial pilot
    D. Policeman
    E. Accountant

14. A person who has a fear of heights would NOT likely enter which occupation?

    A. Telephone lineman
    B. Dressmaker
    C. Window decorator
    D. Carpenter
    E. I don't know

15. Which one has to know the MOST about grammar?

    A. Surveyor
    B. Mechanic
    C. Secretary
    D. Engineer
    E. I don't know

16. Which one advises people about legal claims or rights?

    A. Judge
    B. Accountant
    C. Lawyer
    D. Lecturer
    E. I don't know

17. Which job is NOT in the field of ART?

    A. Illustrator
    B. Typist
    C. Designer
    D. Sculptor
    E. I don't know

18. Which job is found in the RESTAURANT INDUSTRY?

    A. Chef
    B. Librarian
    C. Machinist
    D. Statistician
    E. I don't know

19. In high school Roy was an excellent student. He was in many activities, and was always busy organizing and directing student government projects. In college he took accounting and economics. He went on to graduate school with a grant from U.S. Public Health Service. Roy has a lot of energy. He is active in sports, and he has a special skill for public speaking. Which job do you think he has now?

    A. Medical doctor
    B. Pharmacist
    C. Hospital administrator
    D. Football coach
    E. I don't know

20. Which job requires special training?

    A. Gardener
    B. Electrician
    C. Messenger boy
    D. Construction laborer
    E. I don't know

TEST 5

1. Which job is NOT in the field of COSMETOLOGY?

   A. Seamstress
   B. Manicurist
   C. Stylist
   D. Pedicurist
   E. I don't know

2. Good taste in colors is necessary for which job?

   A. Sociologist
   B. Surgeon
   C. Interior decorator
   D. High school teacher
   E. I don't know

3. Which job is NOT in the field of AVIATION?

   A. Flight engineer
   B. Copywriter
   C. Stewardess
   D. Navigator
   E. I don't know

4. Which one would select paintings to fit the decor of a home?

   A. Arranger
   B. Choreographer
   C. Interior designer
   D. Fashion designer
   E. I don't know

5. Which job is in the field of SALES?

   A. Insurance broker
   B. Bank clerk
   C. Psychologist
   D. Craneman
   E. I don't know

6. A hobby of rock collecting and cave exploration is most useful for which job?

   A. Biologist
   B. Oil-well driller
   C. Geologist
   D. Bricklayer
   E. I don't know

7. Experience as a kitchen helper is most useful for which job?

   A. Restaurant cook
   B. Instrument maker
   C. Gardener
   D. Nurse
   E. I don't know

8. Which job is in a DRIVING OCCUPATION?

   A. Auto mechanic
   B. Flame cutter
   C. Routeman
   D. Highway surveyor
   E. I don't know

9. Which one would engineer the building of a space craft?

   A. Aeronautical engineer
   B. Electrical engineer
   C. Electronic engineer
   D. Mechanical engineer
   E. I don't know

10. Which job requires the LEAST training?

   A. Hair stylist
   B. Mailman
   C. Secretary
   D. Pilot
   E. I don't know

11. Which of the following spends the MOST amount of time at a desk?

   A. Policeman
   B. Actress
   C. Carpenter
   D. Secretary
   E. I don't know

12. Which does NOT have to work with tools?

   A. Barber
   B. Mechanic
   C. Carpenter
   D. Milkman
   E. I don't know

13. Which one usually makes the MOST money?

    A. Lawyer
    B. Librarian
    C. Automobile mechanic
    D. Bank teller
    E. Peddler

14. What kind of work does a SURVEYOR do?

    A. Sells stocks and bonds
    B. Oversees workers in a factory
    C. Determines property lines
    D. Designs roads and highways
    E. I don't know

15. Which job usually requires the MOST education?

    A. Chemical engineer
    B. Teacher
    C. Surveyor
    D. Surgeon
    E. I don't know

16. Which one makes the MOST money usually?

    A. Law clerk
    B. Psychotherapist
    C. Cashier
    D. Social worker
    E. Night watchman

17. Working odd hours is NOT important in which occupation?

    A. Sales clerk
    B. Newspaper reporter
    C. Electrical engineer
    D. Mail carrier
    E. I don't know

18. Which job is NOT in the field of CONSTRUCTION?

    A. Surveyor
    B. Architect
    C. Carpenter
    D. Mechanic
    E. I don't know

19. Which job requires the MOST training?

    A. Sales clerk
    B. Baker
    C. Machinist
    D. Telephone operator
    E. I don't know

20. John was an average student in high school; but he had a hard time in college, where he had chosen economics as his major subject. He worked part-time at a restaurant during all of his college years, and eventually became assistant to the manager. He gets along well with other people and is a good talker. He is now in one of the following jobs. Which job do you think he has?

    A. High school social studies teacher
    B. Salesman for a frozen food company
    C. Hotel manager
    D. Restaurant operator
    E. I don't know

TEST 6

1. Which job is in the field of AGRICULTURE?

   A. Farmer
   B. Hair stylist
   C. Housewife
   D. Carpenter
   E. I don't know

2. Which job is NOT in the field of PUBLISHING?

   A. Editor
   B. Author
   C. Pianist
   D. Printer
   E. I don't know

3. Which job is NOT in the field of TRANSPORTATION?

   A. Truck driver
   B. Stewardess
   C. Mechanic
   D. Architect
   E. I don't know

4. Which job is NOT in the field of PERSONNEL?

   A. Interviewer
   B. Veterinarian
   C. Personnel clerk
   D. Psychologist
   E. I don't know

5. Jane graduated from a consolidated high school in a rural area. She was active in 4-H programs and especially enjoyed the home management and food processing projects that she worked on. She was very good at organizing and managing home economics club projects in high school. Her best grades were in chemistry, biology, and mathematics; her poorest ones were in English. She went on to a four-year science program at the state university. She is now in one of the following occupations. Which job do you think she has?

   A. Food editor for a newspaper
   B. Dietitian
   C. Elementary school teacher
   D. Waitress
   E. I don't know

6. Which of these works MOST with groups of people?

   A. Teacher
   B. Mailman
   C. Secretary
   D. Chemist
   E. I don't know

7. Which job requires the LEAST knowledge of mathematics?

   A. Teacher
   B. Pilot
   C. Mailman
   D. Store clerk
   E. I don't know

8. Which one makes the MOST money?

   A. Hotel front office clerk
   B. Hotel bell boy
   C. Hotel manager
   D. Cook
   E. Maid

9. Which job requires the LEAST training?

   A. Athlete
   B. Policeman
   C. Mechanic
   D. Milkman
   E. I don't know

10. Marine biologists usually have at least:

    A. A college degree
    B. A high school diploma
    C. Two years of high school
    D. A grade school education
    E. I don't know

11. Which job requires the LEAST training?

    A. Elevator repairman
    B. T.V. repairman
    C. Longshoreman
    D. Bookkeeper
    E. I don't know

12. Interest in helping others IS necessary for which job?

    A. T.V. repairman
    B. Nurse
    C. Farmer
    D. Stenographer
    E. I don't know

13. The skill of sewing is most useful for which job?

    A. Nurse
    B. Seamstress
    C. Surgeon
    D. Interior decorator
    E. I don't know

14. The ability to express oneself in writing IS necessary in which job?

    A. Civil engineer
    B. Actor
    C. Secretary
    D. Author
    E. I don't know

15. Success in writing stories IS necessary for which job?

    A. Journalist
    B. Playground director
    C. Aircraft mechanic
    D. Physical therapist
    E. I don't know

16. A CARPENTER:

    A. Finishes concrete surfaces.
    B. Makes walls and chimneys from brick.
    C. Puts up the wood framework in buildings.
    D. Covers pipes and boilers with insulation.
    E. I don't know

17. What kind of work is done by a DIETICIAN?

    A. Sterilizes instruments in a dental clinic.
    B. Supervises exercise and weight control at health clubs.
    C. Sells books on how to reduce.
    D. Plans menus and supervises preparation of meals.
    E. I don't know

18. A PHARMACIST:

    A. Helps persons with bone diseases to overcome their problems.
    B. Treats people's illnesses and prescribes medicines.
    C. Sells drugs and medicines and tells how to use them.
    D. Studies the processes that food is digested.
    E. I don't know

19. Which one handles payments and withdrawals in a bank?

    A. Teller
    B. Cashier
    C. Bookkeeper
    D. Currency sorter
    E. I don't know

20. A DATA PROCESSING EQUIPMENT SERVICEMAN:

    A. Repairs and maintains traffic counters
    B. Repairs and services dictating machines
    C. Maintains and repairs duplicating machines
    D. Installs and maintains computers
    E. I don't know

APPENDIX C

GORDON OCCUPATIONAL CHECK LIST

Gordon Occupational Check List

BY LEONARD V. GORDON

NAME ______________________________ DATE ______________

GRADE OR CLASS ______________ AGE ______________ SEX ______________

SCHOOL ______________ CITY OR TOWN ______________

					TOTAL
B	O	A	T	S	

DIRECTIONS

This Check List was prepared to help you indicate the kinds of work you are interested in doing. It includes a list of activities that are performed in many different kinds of jobs. You are asked to read the list and underline each activity that you would like to do.

You may not be completely familiar with some of the activities. Some of the activities require training that you have not yet had. This need not influence your choice. Consider each activity and then decide whether, after some training, you would like to perform the activity. Underline only those activities that you would like to perform as part of regular, full-time employment.

These are the steps for you to follow:

First step: Read slowly through the list and when you come to an activity that you would like to do on the job, underline it, like this

149. build or repair barrels or kegs

Second step: After you have gone through the entire list, look back over all the activities that you have underlined. Then circle the numbers in front of the activities that you would like to do *the very most,* like this

(149) build or repair barrels or kegs

Third step: Answer the questions on pages 5 and 6.

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First Step: Read the list slowly, and as you come to an activity that you would like to do as part of a full-time job, underline it.

1. sort and deliver mail, messages and packages
2. do routine sorting, numbering and stapling
3. operate a duplicating machine
4. file letters, bills and receipts
5. type routine letters and statements
6. keep records of goods received and stock on hand
7. select and package goods ordered by customers
8. determine the best routes for deliveries

9. grow fruits or nuts commercially
10. grow a variety of vegetables for market
11. grow wheat, oats, barley or rye
12. breed and raise livestock
13. raise chickens for eggs or meat
14. maintain a herd of cattle for milk production
15. train or take care of horses
16. perform a variety of duties on a small farm

17. sort, grade and pack fruits and vegetables
18. cook fruits, vegetables or meats for canning
19. operate can-sealing equipment in a cannery
20. make, wrap and package candies
21. grade food products according to quality
22. operate pasteurizing equipment in a dairy
23. bake bread, cake or pastry in a bakery
24. cut and trim meat in a market

25. make or alter clothing
26. operate a loom or knitting machine
27. dye cloth in a dyeing machine
28. cut fabric or leather according to a pattern
29. sew heavy fabric on a power sewing machine
30. wash or iron clothing in a laundry
31. dry-clean or press suits and other garments
32. repair shoes and other leather goods

33. clean and maintain office or other buildings
34. make beds and clean rooms in a hotel
35. carry baggage and perform services in a hotel
36. register and assign rooms to hotel guests
37. make travel arrangements for people
38. attend to the comfort of airline passengers
39. make all arrangements for large social affairs
40. sort, shelve and check out books in a library

41. operate a telephone switchboard
42. gather information for reports or catalogs
43. read and answer customers' letters
44. receive and make appointments for callers
45. get information from charge account applicants
46. give information or directions to customers
47. type letters from dictation or dictaphone
48. work as a private secretary

49. operate a tractor or other machinery on a farm
50. plant or care for flowers, shrubs or lawns
51. grow trees, plants and flowers in a nursery
52. work as part of a survey crew
53. help explore for mineral or oil deposits
54. help maintain campgrounds in a national forest
55. trap game for meat, skins, or for live sale
56. be a hunting or fishing guide

57. pour molten metal into molds
58. melt ore to extract the metal
59. make objects from sheet copper or brass
60. make parts or objects out of sheet metal
61. make tanks or boilers out of steel plate
62. fuse metal parts together by welding
63. cut, groove and shape metal by machine
64. make metal parts by heating and hammering

65. fire and tend a large commercial furnace
66. maintain proper steam pressure in a boiler
67. make patterns for cutting or casting
68. plate metal objects with nickel, silver or gold
69. plan designs for dies, tools, jigs and fixtures
70. make or repair shop tools or parts
71. move or install heavy industrial machinery
72. load or unload trucks or ship's cargo

73. work behind a soda fountain
74. prepare or cook food in a restaurant
75. work as a helper in a restaurant kitchen
76. wait on table in a restaurant or club
77. be in charge of a dining room or private club
78. seat patrons at a theater or at sporting events
79. give haircuts and shaves
80. give facials, shampoos, or style hair

81. keep accurate records of sales and payments
82. check entries in records and bills for accuracy
83. compute wages of company employees
84. prepare bills and invoices for customers
85. perform computations on a calculating machine
86. operate a key punch or other business machines
87. handle deposits and withdrawals in a bank
88. work as a cashier in a store or restaurant

89. mine for metal ore or coal
90. blast with dynamite or nitroglycerine
91. use instruments to detect and measure radiation
92. do maintenance or construction at great heights
93. cut, load and haul logs in a forest
94. work underwater using diving or SCUBA equipment
95. catch fish for commercial purposes
96. be a member of a ship's crew

97. assemble parts for radio or television sets
98. repair radio and television sets
99. repair refrigerator and air conditioning units
100. repair electric motors and generators
101. fix appliances such as fans, toasters and irons
102. operate and maintain broadcasting equipment
103. make tests on experimental electronics components
104. erect and maintain power or telephone lines

105. straighten automobile fenders and bodies
106. repair and overhaul automobile engines
107. inspect, repair and overhaul aircraft engines
108. maintain a ship's engines, boilers and pumps
109. keep industrial machinery in operating condition
110. assemble motor parts on a subassembly line
111. assemble small mechanical units for airplanes
112. test or evaluate newly designed engines or parts

113. service automobiles in a gasoline station
114. drive a taxicab
115. be a chauffeur for a company or private family
116. operate a public bus or streetcar
117. deliver products over an established route
118. work as a conductor on a railroad
119. operate a passenger elevator
120. pilot an airplane for commercial purposes

121. interview people who apply for jobs
122. try to collect overdue accounts from customers
123. talk with customers about their complaints
124. ask people questions for an opinion poll
125. demonstrate new products in a store
126. take orders from customers over the telephone
127. set up production schedules to meet orders
128. investigate and settle insurance claims

129. design jewelry or other art objects
130. design sets for the theater
131. design new types or styles of wearing apparel
132. create designs for fabrics, wallpaper or linoleum
133. paint or decorate pottery or porcelain
134. prepare advertising copy or displays
135. arrange displays in store windows or showcases
136. plan interiors for homes, hotels, or clubs

137. install or repair plumbing in houses
138. plaster walls and ceilings
139. paint houses or buildings
140. erect framework, joists and partitions in houses
141. put flooring, cabinets and doors in new houses
142. apply or fasten roofing to houses
143. install or connect electrical wiring systems
144. fit and install gas, water and air pipes

145. make brick walls, chimneys or fireplaces
146. finish concrete surfaces on walks or driveways
147. cut and shape sandstone, marble or granite
148. assist in placing steel girders and columns
149. lift or move objects with a crane or hoist
150. operate a bulldozer, power shovel or grader
151. drive a heavy truck or van
152. contract for the building of houses

153. guard property against theft or illegal entry
154. stand guard at a plant or building entrance
155. inspect establishments for cleanliness or safety
156. be in charge of inmates in a jail or prison
157. patrol a neighborhood on foot or in a police car
158. work as a detective or private investigator
159. assist in fighting fires
160. be a member of the armed forces

161. sell goods or services to people
162. sell merchandise or services over the telephone
163. be a salesperson in a department store
164. wait on customers in a variety or drug store
165. sell merchandise or take orders from door to door
166. sell goods, at wholesale, to stores or companies
167. sell automobiles or major household appliances
168. sell insurance, securities or real estate

169. take photographs, develop film and make prints
170. sketch or paint pictures of scenes or people
171. draw cartoons or illustrations
172. make signs or posters
173. write stories, reports or news articles
174. write material for television or radio
175. obtain engagements for entertainers or speakers
176. promote publicity for individuals or organizations

177. convert hides to leather with tanning solution
178. mix pigment, oil and thinner to make paint
179. mold clay to make dishes or pottery
180. prepare rubber compounds for use in making tires
181. mold plastic objects by machine
182. make chemical tests or analyses of materials
183. operate equipment for making glass
184. operate equipment for producing gasoline from oil

185. upholster chairs or couches
186. make, repair or refinish wooden furniture
187. make or repair jewelry or ornaments
188. carve designs on wood or stone
189. grind lenses for binoculars or spectacles
190. clean and repair watches and clocks
191. repair, clean and adjust office machines
192. repair locks and change safe combinations

193. take care of infants or very small children
194. assist nurses by bathing and serving patients
195. do practical nursing in a private home
196. watch and care for mental patients
197. teach handicraft to handicapped persons
198. be a companion to a blind or older person
199. manage a home for a private family
200. care for animals in a veterinary hospital

201. operate or manage a small retail shop or store
202. operate or manage a small business or service
203. manage a motel or small hotel
204. supervise foremen in a plant or factory
205. be in charge of an office or sales staff
206. buy supplies for the use of an organization
207. buy and price merchandise for a retail store
208. decide whether to give people loans or credit

B		
U	C	S

209. operate a projector in a motion picture theater
210. assist with props, lights or cues in a theater
211. perform on a stage or in a night club
212. perform or appear on radio or television
213. be a professional musician or singer

O		
U	C	S

214. be a professional dancer
215. work as a model
216. be a professional athlete

A		
U	C	S

217. prepare type or plates for printing
218. engrave lettering or designs in printing plates
219. take readings of pressure, temperature and wind
220. prepare accurate working plans or drawings
221. check dimensions of parts against a blueprint
222. inspect parts or products for flaws or defects
223. assist engineers in design of machine parts
224. take and classify fingerprints

T		
U	C	S

225. clean and remove deposits from people's teeth
226. assist a dentist in pulling teeth
227. make dental plates, inlays and bridgework
228. perform routine tests in a laboratory
229. test urine and make blood counts
230. take, develop and interpret X-ray pictures
231. give first aid treatment to accident cases
232. assist an undertaker or embalmer

S		
U	C	S

233. supervise the play of young children
234. organize club activities in a community center
235. coach athletic games or teach sports
236. conduct a group in body building exercises
237. teach or instruct a class or group
238. work as an interpreter or translator
239. act as a guide to sightseers or tourists
240. work as a member of a religious organization

Second Step: Look back over the items you have underlined and circle the numbers in front of the activities which you would like to do the very most.

Third Step: Turn to the next page.

Third Step: Please answer the following questions:

List all the occupations (jobs) you can.

(Please turn to page 6.)

APPENDIX D

HIGH SCHOOL COUNSELOR RECORD FORM

_______________ HIGH SCHOOL

MEMPHIS CITY SCHOOLS
SPAN - COUNSELOR RECORD
1971 - 72

This form should be marked each time a student has contact with the counseling or SPAN office. See reverse side for instructions.

(4-6) Name ____ (7-8) Grade _______________

(9-12) Date of Birth ☐☐☐☐ Mo. Yr.

(13) Sex 1 ☐ M 2 ☐ F

(14) 1 ☐ Check here if student is in a vocational program.

	0	1	2	3	4	5	6	7	8	9 or more	
(15)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Conference held regarding selection of occupational field.
(16)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Student selected a field of occupational interest and indicated it positively to counselor.
(17)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Conference held regarding daily problem or personal matter.

---

(18) 1 ☐ Check here if student enrolled in a summer basic skills program.

(19) 1 ☐ Check here if student did NOT complete summer basic skills program.

	0	1	2	3	4	5	6 or more	
(20)	☐	☐	☐	☐	☐	☐	☐	Student placed in a co-op program.

(21) 1 ☐ Check if student failed to complete a co-op work program. Complete next item.

	0	1	2	3	4	5	6 or more	
(22)	☐	☐	☐	☐	☐	☐	☐	Check number of months (rounded to nearest) he (she) worked in incompleted assignment.

(23)

1
☐

Check if student failed to complete a second co-op work program. Complete next item.

(24)

0	1	2	3	4	5	6 or more
☐	☐	☐	☐	☐	☐	☐

Check number of months (round to nearest) he (she) worked on the second incompleted assignment.

(25)

1
☐

Check if student failed to complete three or more co-op work assignments.

(26)

1
☐

Check if student was placed in a job after graduation at least in part through effort of counselor (SPAN or Guidance Office).

(27-28) What type job? ______________________________

(29)

0	1	2	3	4	5	6	7	8	9 or more
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Check each time (up to 9) the student was enrolled in pre-employment orientation as a part of Project SPAN.

(30)

0	1	2	3	4	5	6 or more
☐	☐	☐	☐	☐	☐	☐

Check each time (up to 6) the student was enrolled in an after school basic skills program.

(31)

0	1	2	3	4	5	6 or more
☐	☐	☐	☐	☐	☐	☐

Check each time (up to 6) the student failed to complete an after school basic skills program for which he enrolled.

25. You can't go very far wrong by following your parents' advice about which job to choose.

26. Working is much like going to school.

27. I am having difficulty in preparing myself for the work I want to do.

28. I know very little about the requirements of jobs.

29. The job I choose has to give me plenty of freedom to do what I want.

30. The best thing to do is to try out several jobs, and then choose the one you like best.

31. There is only one occupation for each person.

32. Whether you are interested in a particular kind of work is not as important as whether you can do it.

33. I can't understand how some people can be so set about what they want to do.

34. As long as I can remember I've known what kind of work I want to do.

35. I want to really accomplish something in my work—to make a great discovery or earn lots of money or help a great number of people.

36. You get into an occupation mostly by chance.

37. It's who you know, not what you know, that's important in a job.

38. When it comes to choosing a job, I'll make up my own mind.

39. Choose an occupation which gives you a chance to help others.

40. When I am trying to study, I often find myself daydreaming about what it will be like when I start working.

41. I have little or no idea of what working will be like.

42. Choose an occupation, then plan how to enter it.

43. I really can't find any work that has much appeal to me.

44. Choose a job in which you can someday become famous.

45. If you have some doubts about what you want to do, ask your parents or friends for advice and suggestions.

46. Choose a job which allows you to do what you believe in.

47. The most important part of work is the pleasure which comes from doing it.

48. I keep changing my occupational choice.

49. As far as choosing an occupation is concerned, something will come along sooner or later.

50. Why worry about choosing a job when you don't have anything to say about it anyway.

VDI

BEST COPY AVAILABLE

DIRECTIONS:

There are a number of statements about occupational choice and work listed in this booklet. Occupational choice means the kind of job or work that you think you will probably be doing when you finish all of your schooling.

If you agree or mostly agree with the statement, use your pencil to blacken the circle in the column headed *T* on the separate answer sheet. If you disagree or mostly disagree with the statement, blacken the circle in the column headed *F* on the answer sheet. Be sure your marks are heavy and black. Erase completely any answer you wish to change.

Part I

1. Once you choose a job, you can't choose another one.
2. In order to choose a job, you need to know what kind of person you are.
3. I plan to follow the line of work my parents suggest.
4. I guess everybody has to go to work sooner or later, but I don't look forward to it.
5. A person can do any kind of work he wants as long as he tries hard.
6. I'm not going to worry about choosing an occupation until I'm out of school.
7. Your job is important because it determines how much you can earn.
8. Work is worthwhile mainly because it lets you buy the things you want.
9. The greatest appeal of a job to me is the opportunity it provides for getting ahead.
10. I often daydream about what I want to be, but I really haven't chosen a line of work yet.
11. Knowing what you are good at is more important than knowing what you like in choosing an occupation.
12. Your parents probably know better than anybody which occupation you should enter.
13. If I can just help others in my work, I'll be happy.
14. Work is dull and unpleasant.
15. Everyone seems to tell me something different; until now I don't know which kind of work to choose.
16. I don't know how to go about getting into the kind of work I want to do.
17. Why try to decide upon a job when the future is so uncertain.
18. I spend a lot of time wishing I could do work that I know I cannot ever possibly do.
19. I don't know what courses I should take in school.
20. It's probably just as easy to be successful in one occupation as it is in another.
21. By the time you are 15, you should have your mind pretty well made up about the occupation you intend to enter.
22. There are so many things to consider in choosing an occupation, it is hard to make a decision.
23. I seldom think about the job I want to enter.
24. It doesn't matter which job you choose as long as it pays well.

APPENDIX E

CRITES' VOCATIONAL DEVELOPMENT INVENTORY

APPENDIX F

PRINCIPALS' QUESTIONNAIRE

Dear Principal:

Please complete this brief questionnaire to the best of your knowledge. We are seeking information which will be helpful in evaluating Project SPAN. Please be honest and frank in your responses. You need not identify yourself or school.

Grades served by your school: ____________

Has your school participated directly in Project SPAN? ___Yes ___No
If yes, for how many years? ______

Was the career education emphasis of SPAN adequately presented to you and your staff? ___Yes ___No ___Not sure

Do you feel that career education should be a part of the curriculum at your school?
___Yes ___No ___Not sure

Do you think that Project SPAN provides a service of value to your students?
___Great ___Some ___None

Do you think the school should be responsible for providing its students with entry-level skills for jobs? ___Yes ___No ___Not sure

Do you think guidance counselors should be expected to help students get jobs as well as help those who seek additional training? ___Yes ___No ___Not sure

What special difficulties or problems has the SPAN project brought to your school?

What assistance has the SPAN project given you?

Would you like to see the SPAN concept continued in your school? ___Yes
___No ___Not sure

Please add any additional comments on the back of this sheet which you think will help the SPAN officials evaluate the project.